Bob Kenton

ADMINISTRATIVE DRAFT

SOUTH COUNTY REGIONAL WASTEWATER AUTHORITY RECYCLED WATER BOOSTER PUMP STATION AND RESERVOIR

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

March 6, 2000

Prepared for: South County Regional Wastewater Authority



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South County Regional Wastewater Authority

Recycled Water Booster Pump Station and Reservoir

Initial Study/Mitigated Negative Declaration

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INITIAL STUDY CHECKLIST

The following Environmental Checklist and discussion of potential environmental effects were completed in accordance with Section 15063(d)(3) of the CEQA Guidelines (October 1998) to determine if the proposed project could have any significant effect on the environment.

A brief explanation is provided for all determinations. A "No Impact" or "Less than Significant Impact" determination is made when the project will not have any impact or will not have a significant effect on the environment for that issue area based on a project-specific analysis.

CEQA ENVIRONMENTAL CHECKLIST FORM AND INITIAL STUDY

1. Project Title:

South County Regional Wastewater Authority (SCRWA) Recycled Water

Booster Pump Station and Reservoir

2. Lead Agency Name and Address: South County Regional Wastewater Authority

7351 Rosanna Street Gilroy, California 95020

3. Contact Person and Phone Number:

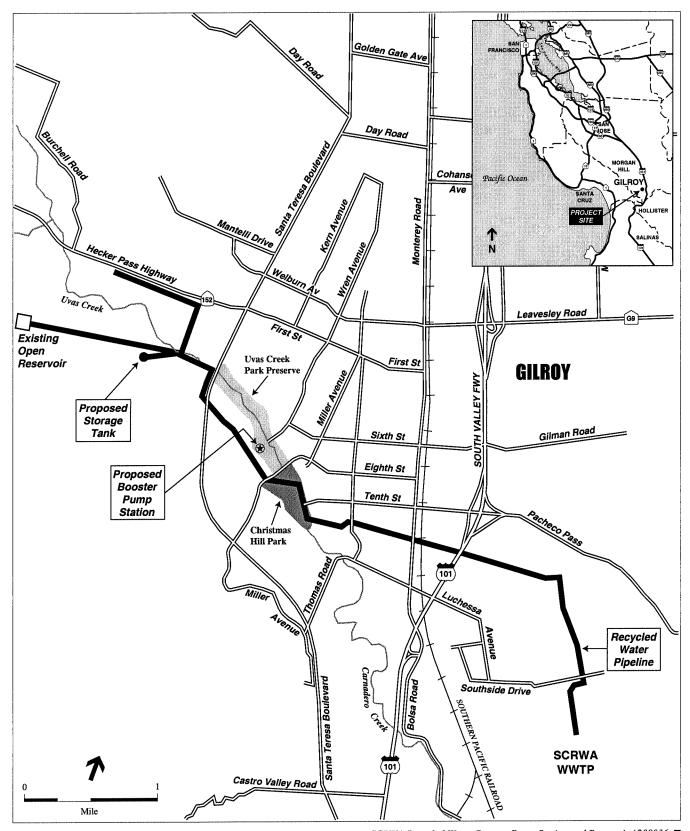
Jim Gasser (408) 848-1480

4. Project Location: The project is located within the city limits of Gilroy in Santa Clara County, California. The eight-mile pipeline extends from the South County Regional Wastewater Authority Treatment Plant in southeast Gilroy, through the City of Gilroy to the Eagle Ridge development. The proposed booster station would be located at Christmas Hill Park along Uvas Creek. The reservoir would be located on a hillside above the Eagle Ridge development. Figure 1 shows the project location.

5. Project Sponsor's Name and Address:

South County Regional Wastewater Authority

7351 Rosanna Street Gilroy, California 95020



SOURCE: Environmental Science Associates.

SCRWA Recycled Water Booster Pump Station and Reservoir / 200036 Figure 1
Regional Location Map

- **6. General Plan Designation:** The pipeline traverses the City of Gilroy within a utility easement held by the Santa Clara Valley Water District. The booster pump station would be located in the Ranch Site Addition of Christmas Hill Park, within the Uvas Creek Park Preserve which is managed through the City of Gilroy Parks and Recreation Commission. The Draft General Plan designation for Christmas Hill Park is Park/Public Facility. The storage tank would be located on a hillside above the Eagle Ridge development, designated in the Draft General Plan as Low Density Residential.
- **7. Zoning:** The booster pump station location has a City of Gilroy zoning designation of PF Public Facility. The reservoir location is zoned RH Hillside Residential.
- **8. Description of Project:** The South County Regional Wastewater Authority (SCRWA) in partnership with the Santa Clara Valley Water District (SCVWD) is proposing to upgrade the existing recycled water distribution system servicing western Gilroy. The proposed project includes improvements to an existing recycled water distribution system serving the City of Gilroy area. The existing pipeline extends from the SCRWA water reclamation plant for 42,240 feet, or approximately eight miles to it terminus in the eastern slope of the Santa Cruz Mountains south of Hecker Pass Road. Improvements would include retrofits to the pipeline, construction of a booster pump station, and construction of a 1.1 million-gallon storage tank.

Valves and fittings on the existing 12-inch recycled water pipeline would be replaced including air relief valves, isolation valves, blow-off valves, surge relief valves, service turnouts, gate valves, main line and emergency drain line butterfly valves, flow meters, and isolation valve tees.

The booster pump station would be constructed in the Ranch Site Addition portion of Christmas Hill Park. The booster pump would increase the recycled water pressure in the existing distribution system from 60 pounds per square inch (psi) to approximately 120 psi.

The 1.1 million-gallon, above-grade steel reservoir and associated pipeline would be installed on the hillside above the Eagle Ridge Golf Course. The proposed tank location is within the new Eagle Ridge development currently under construction. The parcel will be sold to the City of Gilroy and SCRWA. The tank would serve as a reservoir for recycled water to increase system flexibility and reliability.

9. Surrounding Land Uses and Setting: The existing pipeline easement traverses the City of Gilroy, through industrial areas, commercial areas, residential areas, agricultural, recreational, open space, and transportation corridors.

The booster pump station would be located in Christmas Hill Park, a recreation area managed by the City of Gilroy. The park includes playing fields and is bordered by Uvas Creek.

The reservoir would be situated in a newly established residential area near the Eagle Ridge Golf Course. Potable water tanks are located approximately 500 feet up hill within a designated open space area. **Figures 2** through **5** show current pictures of the project sites.

10. Other agencies whose approval is required:

- Santa Clara Valley Water District
- City of Gilroy, Planning Department
- Regional Water Quality Control Board, Central Coast Region

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agriculture Resources	Air Quality
Biological Resources	□ Cultural Resources	Geology / Soils
Hazards & Hazardous Materials	Hydrology / Water Quality	☐ Land Use / Planning
Mineral Resources	Noise Noise	☐ Population / Housing
Public Services	☐ Recreation	☐ Transportation / Traffi
Utilities / Service Systems	☐ Mandatory Findings of Significan	ce

DETERMINATION

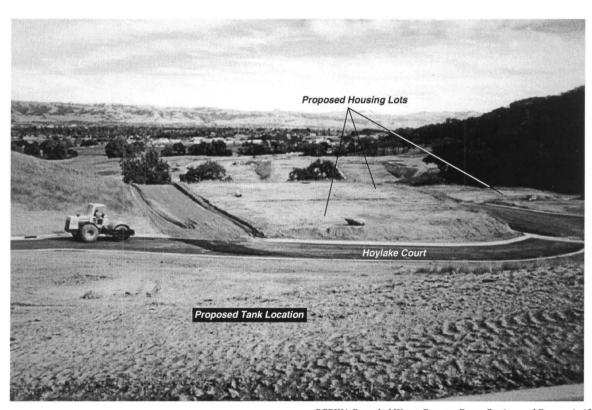
On th	ne basis of this initial evaluation:	
	I find that the proposed project COULD NOT have NEGATIVE DECLARATION will be prepared.	a significant effect on the environment, and
\boxtimes	I find that although the proposed project could have will not be a significant effect in this case because agreed to by the project proponent. A MITIGATE prepared.	revisions in the project have been made by or
	I find that the proposed project MAY have a signific ENVIRONMENTAL IMPACT REPORT is require	
	I find that the proposed project may have a "potenti significant unless mitigated" impact on the environ adequately analyzed in an earlier document pursuar been addressed by mitigation measures based on the sheets. An ENVIRONMENTAL IMPACT REPORT	ment, but at least one effect 1) has been at to applicable legal standards, and 2) has a earlier analysis as described on attached
	I find that although the proposed project could have because all potentially significant effects (a) have be pursuant to applicable standards, and (b) have been EIR, including revisions or mitigation measures than othing further is required.	een analyzed adequately in an earlier EIR avoided or mitigated pursuant to that earlier
Signa	ture	Date
Printe	d Name	For



SOURCE: Environmental Science Associates

SCRWA Recycled Water Booster Pump Station and Reservoir / 200036 ■

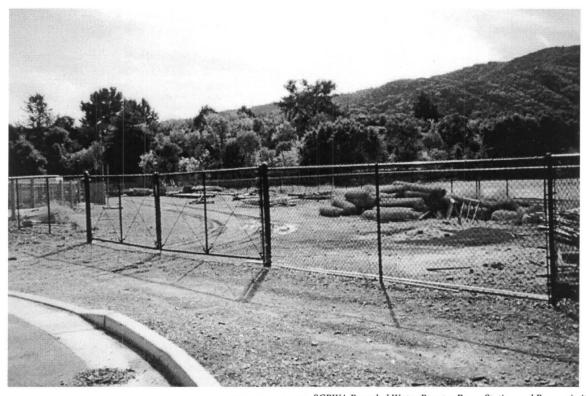
Figure 2 View of Tank Location



SOURCE: Environmental Science Associates

SCRWA Recycled Water Booster Pump Station and Reservoir / 200036 $\ \blacksquare$

Figure 3
View East of Tank Location



SOURCE: Environmental Science Associates

SCRWA Recycled Water Booster Pump Station and Reservoir / 200036 ■

Figure 4
Pump Station Site on Christmas Hill Park (Looking Southwest)



SOURCE: Environmental Science Associates

SCRWA Recycled Water Booster Pump Station and Reservoir / 200036 ■

Figure 5
Pump Station Site (Looking West)

SECTION 1

PROJECT DESCRIPTION

INTRODUCTION

The South County Regional Wastewater Authority (SCRWA) in partnership with the Santa Clara Valley Water District (SCVWD) is proposing to upgrade the existing recycled water distribution system servicing western Gilroy. The existing system distributes treated wastewater from the SCRWA Gilroy/Morgan Hill Wastewater Treatment Plant (WWTP) in southeast Gilroy to users on the west side of Uvas Creek. The proposed project would increase the capacity of the existing system through the installation of a new 1.1 million-gallon recycled-water reservoir in the hills above the Eagle Ridge Golf Course, the installation of a booster pump station in Christmas Hill Park, and upgrading of the existing 12-inch diameter, 8-mile pipeline. The project would increase the system capacity from 2 mgd to approximately 3 mgd. Figure 1 identifies the proposed locations of the project components.

This document summarizes the results of an Initial Study conducted to identify significant environmental effects which could occur as a result of the proposed project. The Initial Study was prepared pursuant to the requirements of Section 15063 of the California Environmental Quality Act (CEQA) Guidelines.

PROJECT OBJECTIVES

Water recycling continues to be a major component of water management planning in California. As the demand for water in California increases, water reclamation has been identified as a means of alleviating demand on potable water. The California Water Code, Section 13512 states that it is the intention of the legislature that the State undertake all possible steps to encourage development of water reclamation facilities so that recycled water may be made available to help meet the growing water demands of the State. The City of Gilroy Draft General Plan identifies water reclamation as a priority in the following policies and actions:

Policy 23.01

Water Conservation and Reclamation. Promote water conservation and encourage the use of reclaimed or recycled water to reduce the overall demand on water resources. Ensure that recycled wastewater is treated in accordance with state and federal standards.

Policy 23.02

Water Reclamation Facilities. Encourage development of water reclamation facilities, where feasible, in order to make reclaimed water available to help meet the growing water needs of the South County region.

Policy 23.04

Irrigation with Reclaimed Water. Use reclaimed water for landscape irrigation especially for large water users such as golf courses.

Action 23.A

Water Reclamation Program. Continue to recycle treated wastewater from the South County Regional Wastewater Authority treatment facility, in accordance with state and federal standards, for use in landscape irrigation. Work with land owners and developers with significant irrigation needs to provide facilities using reclaimed water.

Reclaimed water can be used for landscape irrigation, agricultural irrigation, and industrial processes in place of potable water. The proposed project has been identified by SCRWA and the SCVWD as a means of increasing the flexibility and reliability of the reclaimed water distribution system in the Gilroy area in order to increase the volume of recycled water currently distributed through the system. The increased availability of recycled water would enable SCRWA to continue pursuing new recycled water customers. The proposed project would upgrade the existing distribution system to accommodate up to 3 mgd, equal to the current tertiary treatment capacity of the WWTP. However, depending on the local market for recycled water in south Santa Clara County, future projects could increase recycled water deliveries from the Gilroy/Morgan Hill WWTP from current levels of less than 2 mgd to as much as 15 mgd.

PROJECT LOCATION

The project is located in Santa Clara County, California. The existing pipeline begins at the Gilroy/Morgan Hill WWTP in southeastern Gilroy and traverses the city northwestward, terminating at an open reservoir in the hills west of the Eagle Ridge development. An additional spur of the pipeline terminates at the Gilroy City Golf Course. The proposed booster pump station would be located on the west side of the Ranch Site Addition of Christmas Hill Park near the existing City-owned storage yard. The site would be within the Uvas Creek Park Preserve Master Plan Area, which extends northward along the creek to Santa Teresa Boulevard. The Preserve was established in 1993. Christmas Hill Park is the

location of the annual Garlic Festival held in Gilroy. The storage tank would be located on the west side of Hoylake Court in the new Eagle Ridge development. Figure 1 shows the locations of project components.

PROJECT BACKGROUND AND PREVIOUS ANALYSIS

EXISTING SYSTEM

The existing recycled water pipeline was installed in 1978 by the SCVWD to service primarily agricultural interests on the west side of Uvas Creek in the city of Gilroy. The distribution system capacity is approximately 2 mgd. Currently, the recycled water distribution system operates on an asneeded basis supplying approximately 1 mgd of tertiary treated recycled water to the Eagle Ridge Golf Course and less than 0.25 mgd each to Christmas Hill Park and the Obata farm properties in the vicinity of the wastewater treatment plant.

The existing pipeline has been altered in some places since its initial installation. As part of the Eagle Ridge development grading and infrastructure preparation, a lateral 14-inch diameter spur was installed from the pipeline to the proposed location of the storage tank at the Eagle Ridge development. Additionally, SCVWD plans to re-route the pipeline through Uvas Creek Park Preserve north of the proposed pump station to accommodate the property development to the north of the park.

At the time the pipeline was installed, the Gilroy/Morgan Hill wastewater treatment plant produced advanced primary effluent only. Use of the reclaimed water pipeline was limited due to poor quality of the available water. Secondary treatment facilities were installed at the Gilroy/Morgan Hill WWTP operated by SCRWA in 1995 to treat up to 7.5 mgd. Additional filtration and disinfection capabilities were also installed in 1995 to produce a maximum capacity of 3 mgd of high quality recycled water. The WWTP currently discharges secondary treated effluent to percolation ponds under Waste Discharge Order No. 99-29 issued by the Regional Water Quality Control Board, Central Coast Region (RWQCB) in 1999.

PREVIOUS ANALYSIS

LONG TERM WASTEWATER MANAGEMENT PLAN EIR

In 1990, the cities of Gilroy and Morgan Hill jointly prepared an Environmental Impact Report (EIR) titled Long Term Wastewater Management Plan for the Cities of Gilroy and Morgan Hill (Management Plan EIR). The Management Plan EIR identified impacts associated with future wastewater generation and treatment capacity needs for the area, taking into consideration projected growth estimates. The Management Plan EIR recommended the installation of secondary and tertiary treatment facilities at the

WWTP as the first of a four-phased expansion. As previously noted, these facilities were installed in 1995, providing 7.5 mgd treatment capacity and 7.1 mgd disposal capacity. The second phase included upgrading the facility's disposal capacity from 7.1 mgd to 11.25 mgd. The third and fourth phases provided for increased treatment and disposal capacity as needed up to 15 mgd.

Wastewater reclamation was identified in the Management Plan EIR as a critical component for each treatment alternative analyzed. The report states that water reclamation should be aggressively pursued since it assists in conserving valuable water resources, reducing draft on groundwater supplies, and increasing wastewater disposal capacity. Short-term alternatives identified to increase reclamation volumes include improved marketing and increased customer base. As a means of providing interim disposal capacity, the Management Plan EIR suggests expanding the existing recycled water pipeline, identifying industrial customers for cooling water or commercial toilet flushing, and recharging potable water aquifers. Impacts from water reclamation were identified as being beneficial. The Management Plan EIR included the following mitigation measure with respect to water resources impacts:

The cities should regularly assess the potential markets for expanding uses and contracting new uses for reclaimed wastewater from the reclamation facility. If adequate market support is identified, additional reclamation of treated wastewater should be implemented to the extent feasible for the Long Term Plan alternative selected.

WATER RECLAMATION PLANNING STUDY

In 1995, SCRWA prepared a *Water Reclamation Planning Study* to further identify future recycled water demand and distribution system requirements. The modification of the existing pipeline and installation of a storage tank were identified as the first "building block" of the preferred scenario or Apparent Best Alternative (ABA). The *Water Reclamation Planning Study* included other components or "building blocks" to be implemented in the future as part of the ABA. These other components included providing recycled water to the following entities:

- neighboring properties which would not require a distribution system upgrade,
- the Gavilan College area for which a dedicated pipeline would be installed,
- municipal and industrial uses within the City of Gilroy, and
- agricultural uses north of the City of Gilroy.

The modifications to the existing pipeline (proposed project) would allow SCRWA to maximize the available distribution capacity of the existing system which serves the western side of Uvas Creek. This increased usage plus the continued uses in areas neighboring the WWTP (Obata farm) would account for the existing tertiary effluent maximum capacity of 3 mgd. Additional tertiary treatment capacity would be required to accommodate the last three components of the Planning Study. As such, this Initial Study analyzes the existing pipeline expansion and potential increase in customer base to accommodate the

existing 3 mgd capacity of tertiary-treated wastewater. Increasing tertiary treatment capacity is not included in the analysis.

SANTA CLARA VALLEY WATER DISTRICT INTEGRATED WATER RESOURCES PLAN

In 1997, the SCVWD prepared a 20-year planning document outlining potential strategies to meet water demand in the Santa Clara Valley to the year 2020. The document, titled *Integrated Water Resources Plan*, included maximizing water recycling within the County as a key component. The preferred strategy for County-wide water recycling called for a minimum of 6,000 acre-feet and up to 31,000 acre-feet of recycled water capacity, contingent upon potential partnerships with wastewater treatment agencies in the County. Non-potable water recycling projects currently in operation within the SCVWD service area include the San Jose/Santa Clara Recycling Project, Sunnyvale Recycling Water Project, Palo Alto Recycling Project, and the SCRWA Recycling Project in Gilroy.

In 1993, the SCVWD's Board of Directors adopted a non-potable recycling policy which provides for the District's financial participation to encourage the development of non-potable recycling projects in the County. The District will provide financial assistance equivalent to the avoided cost of new water supplies for non-potable recycled water produced.

EAGLE RIDGE DEVELOPMENT EIR

The proposed reclaimed water storage tank would be located on the Eagle Ridge (O'Connell Ranch) development on a hillside above the Eagle Ridge Golf Course. This residential development is currently under construction and is scheduled for complete build-out by the year 2005. The development is permitted by the City of Gilroy to construct 100 homes per year through the year 2000, after which time 50 homes per year will be constructed until build-out. Currently, approximately 400 homes have been built. Two homes are planned for lots across the street from the proposed tank location. An additional four homes are to be built on Hoylake Court approximately 100 feet downhill from the tank location. The homes are scheduled to be completed by the end of the year 2000.

The Environmental Impact Report (EIR) for this development (O'Connell Ranch EIR) completed in 1992 identified the use of reclaimed water for landscape irrigation as a means of reducing water demand and providing additional wastewater effluent discharge capacity. As part of the analysis conducted for the O'Connell Ranch EIR, the developer prepared a report entitled *Wastewater Reclamation Plan for the Southwest Quadrant of Gilroy, California*. This report identified potential treatment systems, distribution systems, and uses for reclaimed water in the Gilroy area. The plan proposed the construction of a satellite treatment plant located along the existing 12-inch reclaimed water pipeline and a 320-acre-feet open reservoir located in the northwest corner of the development. The O'Connell Ranch EIR analyzed

impacts of the conceptual plan and provided mitigation measures to reduce potential impacts. The proposed satellite treatment plant and open reservoir have since been rejected by SCRWA, in favor of increased treatment capacity at the Gilroy/Morgan Hill WWTP and an enclosed storage tank for recycled water.

WATER RECLAMATION REQUIREMENTS

The Gilroy/Morgan Hill WWTP treats an average dry weather flow (ADWF) of 7.5 mgd using advanced secondary treatment processes. The treatment consists of influent screening, aerated grit removal, nitrification, denitrification, oxidation using an oxidation ditch, and secondary clarification. The tertiary process consists of coagulation, filtration, chlorination, and dechlorination and has a capacity of 3 mgd. Under the Waste Discharge Requirement No. 99-29, the plant effluent can be discharged to 370 acres of percolation/evaporation ponds in the immediate vicinity of the plant. The facility applied for an additional discharge permit to discharge peak flows to the Pajaro River, but the application was denied by the RWQCB. As a result, the WWTP does not have overflow discharge capabilities to the Pajaro River.

The RWQCB issued a Master Water Reclamation Requirements (MWRR) Order No. 98-052 to SCRWA in 1998 for the distribution of tertiary treated effluent for reclamation uses. The MWRR permits up to 15 mgd of disinfected tertiary recycled water to be distributed through the existing system to current users as well as to future users through new pipelines yet to be constructed. Appendix A of this report includes a copy of the MWRR.

The California Water Code, Section 13521 states that the Department of Health Services (DHS) has the authority to "establish statewide reclamation criteria for each varying type of use of reclaimed water where such use involves the protection of public health." The MWRR requires that the effluent meet DHS water reclamation criteria (Title 22, Division 4, Chapter 3, Sections 60301-60355 of the California Code of Regulations). The MWRR includes monitoring and reporting requirements for SCRWA as well as for the users (customers). Recycled water customers are required to comply with the prohibitions and limitations outlined in the MWRR.

SCRWA conducts a training course for recycled wastewater users. The course instructs prospective users on the public health hazards and appropriate application methods for different land uses in an effort to maintain compliance with DHS criteria. Prior to receiving contracted recycled wastewater, customers must attend the training course.

PROJECT DESCRIPTION

PIPELINE

The existing underground pipeline is 12 inches in diameter and is designed to withstand 60 psi of pressure. In order to maximize distribution efficiency, the proposed system would be upgraded to 120 psi of pressure. This would require the replacement of valves and fittings along the entire length of the pipeline. Construction activities would include accessing the underground pipeline, replacing valves and fittings, and reburying the pipeline with the excavated material. Some import fill material may be required to rebury the pipeline.

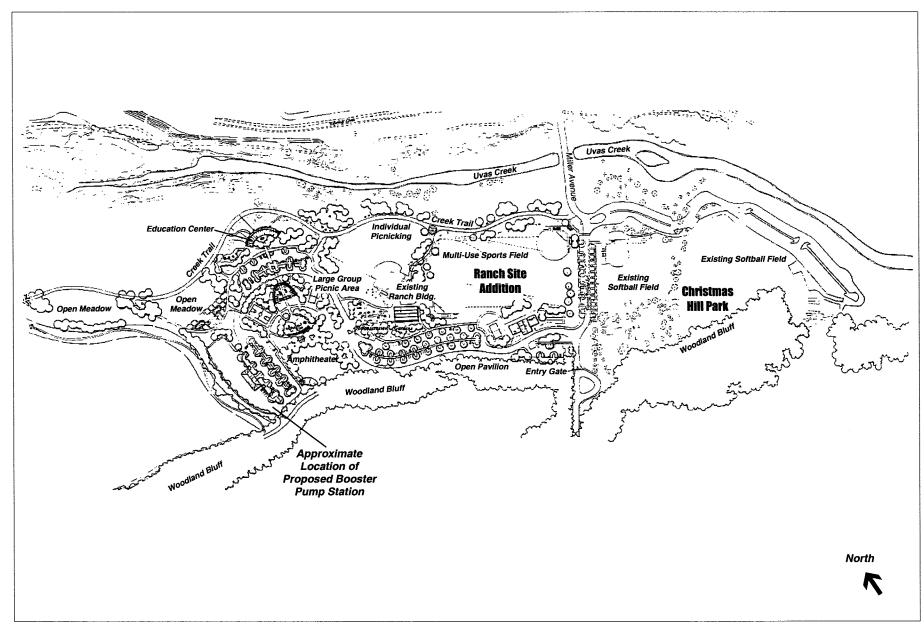
In the future, as the demand for recycled water increases, additional work may be required to upgrade the distribution system. The *Water Reclamation Planning Study* conducted in 1995 identified specific future users in the Gilroy area for which new pipelines would be constructed. Some of these future pipelines may tie into the existing pipeline. These future projects are not covered in this Initial Study.

PUMPING STATION

The proposed pumping station would be located in Ranch Site Addition of the Christmas Hill Park within the city limits of Gilroy. The site is part of the Uvas Creek Park Preserve. Figure 1 shows the proposed location. The pump station would be fully enclosed with a single story structure of approximately 1,000 square feet. The structure would be constructed of concrete block or similar material and would utilize earth tones and non reflective materials in order to blend in with the surrounding area. The equipment housed at the station would include three 700 gallon-per-minute (gpm) pumps, providing an additional 60 psi of pressure on the recycled water line. An additional 100 gpm pump may also be installed as back-up. No other equipment would be housed in the pump station. Electrical connections would be located within an exterior electrical pad. Electricity would be provided through existing power lines at Christmas Hill Park. No fuel or treatment chemicals would be stored at the pump station.

The pump station structure would be located within 20 feet of the existing pipeline. A connection would be installed from the pipeline to the pump station. The property is currently owned by the City of Gilroy and is zoned for PF – Public Facility. SCRWA would purchase the property beneath the footprint of the building as part of the project. Figures 4 and 5 show existing views of the pump station location. **Figure** 6 shows the Uvas Creek Park Preserve Plan Area.

Construction activities would include transporting equipment to the site and erecting the one-story structure. A trench would be cut to access the existing pipeline and connect to the pump station. The trench would be less than 25 feet long, depending on the exact location of the building in relation to the existing pipeline.



SOURCE: Uvas Creek Park Preserve Master Plan, Initial Study. EMC Planning Group Inc, February 1993.

SCRWA Recycled Water Booster Pump Station and Reservoir / 200036

Figure 6
Christmas Hill Park and Ranch Site Addition as Proposed in Uvas Creek Park Preserve Master Plan

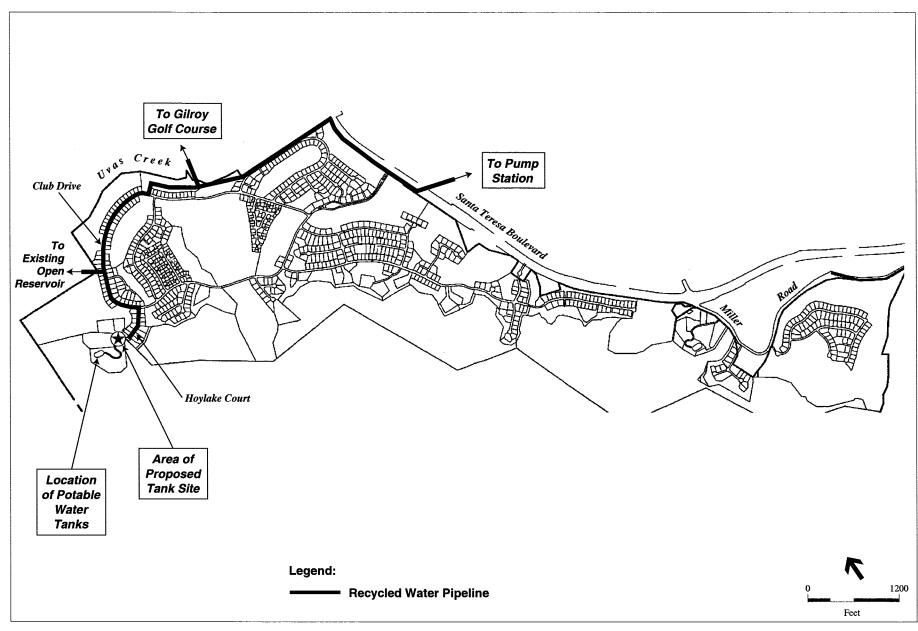
STORAGE TANK

The proposed project would involve the construction of a 1.1 million-gallon steel storage tank on a hillside above the Eagle Ridge Golf Course within the City limits of Gilroy. Figure 1 shows the proposed location of the tank. The property is currently owned by the City of Gilroy and would be transferred to SCRWA prior to project completion. The tank would provide flexibility to the existing distribution system, allowing uninterrupted supply to the Eagle Ridge Golf Course during periods when other users were drawing water directly from the pipeline. The proposed site is located on a steep grade of approximately 20 percent, and the installation would require cutting into the hillside to provide a flat pad for the tank. Approximately 3,000 cubic yards of soil would be excavated from the hillside. Some of the excavated material may be used for on-site landscaping and screening. Excess cut material would be disposed of at a local landfill. The tank itself would be assembled on site. Figures 2 and 3 show existing views of the tank location. Figure 7 shows the Eagle Ridge development layout.

Surrounding land uses include residential areas immediately across the road continuing downhill to the valley floor. As the photograph in Figure 3 shows, the neighboring houses have not yet been constructed, although the pads have been graded and prepared. The hilltop behind the tank is designated open space. Two 700,000-gallon potable water storage tanks owned by SCVWD currently exist approximately 500 feet up hill from the proposed location.

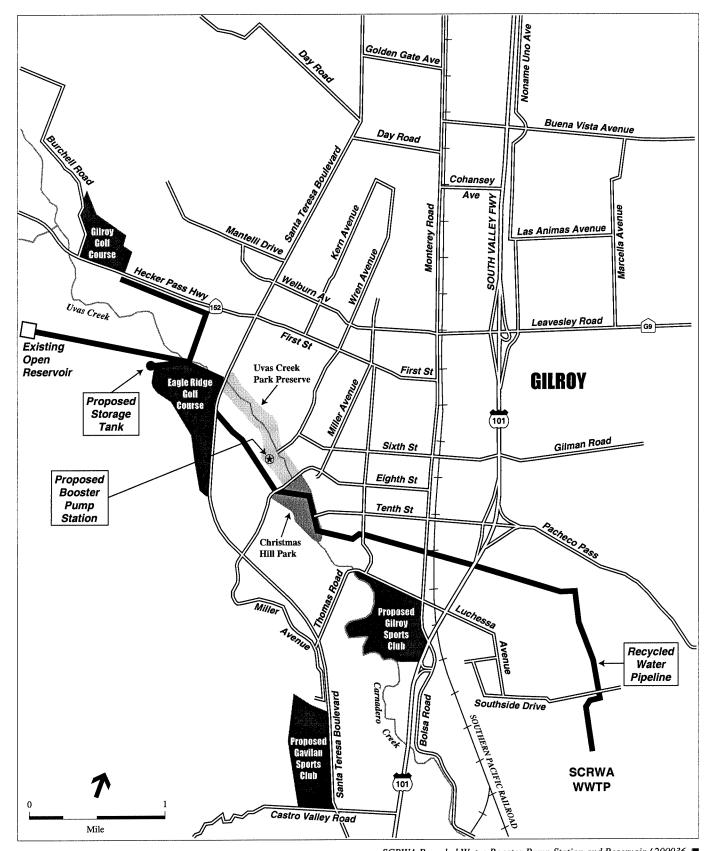
POTENTIAL NEW RECYCLED WATER CUSTOMERS

The prospective users of the recycled water would include the current users: Eagle Ridge Golf Course, Christmas Hill Park and Ranch, and the Obata farm. The availability of recycled water through the upgraded pipeline could promote the establishment of additional users. Prospective new customers could include the Gilroy Sports Park on Thomas Road, the City of Gilroy Golf Course, and the Gavilan Sports Park. **Table 1** summarizes the estimated demand for recycled water. **Figure 8** shows the locations of prospective recycled water users. In addition to these properties, other prospective users could become available. The prospective customers have not used recycled wastewater in the past. Current users may increase the amount of applied water as needed. All users are required to comply with the prohibitions and limitations for recycled wastewater use as outlined in the MWRR issued to SCRWA by the RWQCB in 1998.



SCRWA Recycled Water Booster Pump Station and Reservoir / 200036

Figure 7
Eagle Ridge Development and Golf Course



SOURCE: Environmental Science Associates.

SCRWA Recycled Water Booster Pump Station and Reservoir / 200036 ■ Figure 8

Locations of Current and Potential Future Users

Table 1
Summary of Estimated Recycled Water Demand through 2006

Customer	Irrigated Acres	Total Flow (Acre-feet)	Average Flow (mgd)	Peak Flow (mgd)	Time of Use
SCRWA		560	0.5	0.5	
Farmland Irrigation	317	922.5	0.82	1.11	6am-noon
Thomas Road Sports Park	13.2	42.2	0.04	0.11	Midnight to 6 am
Christmas Hill Park	8.0	23.3	0.02	0.06	Midnight to 6 am
Christmas Hill Ranch	6.0	17.5	0.02	0.05	Midnight to 6 am
Eagle Ridge Golf Course	100	291	0.26	0.78	Midnight to 6 am
Gilroy Golf Course	50	145.5	0.13	0.39	Midnight to 6 am
Total	494.2	2,002	1.79	3.0	_

Source: Montgomery Watson, 2000

SCHEDULE

Construction is scheduled to begin in August of 2000 and be completed by August of 2001. The storage tank would be installed first and would be completed prior to December 2000. Earthwork required for the installation of the pump station would be completed prior to December 2000. The pump station building would be constructed in early 2001. The pipeline retrofit activities would be on-going beginning in August of 2000 and ending by August 2001.

SECTION 2

EVALUATION OF ENVIRONMENTAL IMPACTS:

T.	A	EST	LH.	\mathbf{F}'	T	CS

			Less Than		
			Significant		
		Potentially	With	Less Than	
		Significant	Mitigation	Significant	No
		<u>Impact</u>	Incorporation	_Impact_	Impact
Would t	he project:				
a)	Have a substantial adverse effect on a scenic vista?			\boxtimes	
b)	Substantially damage scenic resources, including,				
	but not limited to, trees, rock outcroppings, and			•	
	historic buildings within a state scenic highway?				\boxtimes
c)	Substantially degrade the existing visual character				-
	or quality of the site and its surroundings?		\boxtimes		
d)	Create a new source of substantial light or glare				
	which would adversely affect day or nighttime				
	views in the area?		\boxtimes		

Discussion:

a) The City of Gilroy is situated on the Santa Clara Valley floor, bordered to the east by the Diablo Mountains and to the west by the Santa Cruz Mountains. The mountains provide a scenic backdrop to the city and portions are designated open space. The City of Gilroy Draft General Plan defines open space as areas which provide for natural environment preservation, outdoor recreation, agriculture, greenbelts, urban buffers, scenic resources, or viewshed preservation. Portions of the Hecker Pass Road corridor west of Santa Teresa Boulevard are within a Special Use District designated by the City of Gilroy to preserve the rural character and scenic views of the area. The Eagle Ridge development and proposed tank location are approximately one half mile south of the Special Use District across Uvas Creek. The City has not yet prepared Specific Plan for the area.

The Subsequent Environmental Impact Report for the Eagle Ridge development prepared in 1992 (O'Connell Ranch EIR) identifies aesthetic impacts from the new development as a whole as being significant and unavoidable. The report identifies the potable water tanks as part of the project, stating that they would have to be located at higher elevations and would contribute to the overall visual impact of the development project. These tanks have been placed just up hill from the proposed recycled water tank. The two 700,000-gallon water tanks are visible from the valley floor and have been painted green to blend in with the surrounding vegetation. Several large trees obscure the tanks from most view points. The proposed recycled water tank was not identified in the 1992 Eagle Ridge EIR.

The installation of the proposed recycled water storage tank on the hillside in the new Eagle Ridge development could impact scenic views in the area. The tank site is not within a designated open space area but may be visible from the valley floor from Santa Teresa Boulevard. The ridge line behind the Eagle Ridge development is predominantly open space consisting of oak tree habitats which contribute to the scenic vista and visual character of the area.

As shown in the photo-simulations contained in Appendix B, the proposed recycled water tank site is visible from portions of the valley floor to the east. The existing hills block the view to the south, west, and north. The project area is currently under development as the photographs in Figures 2 and 3 show. A pad has been graded across the street, directly east of the proposed storage tank location which will accommodate two housing units. These new houses will block the view of the tank from the valley floor substantially. As a result, impacts to the scenic views of the hills from the valley floor would not be significant.

- b) No State-designated Scenic Routes exist within the City of Gilroy. Therefore, the project components would not damage scenic resources within a state scenic highway. However, the city has identified several scenic routes in the vicinity of the project including Uvas Park Drive, Santa Teresa Boulevard, and Hecker Pass Road. The City of Gilroy Draft General Plan strives to preserve existing views, trees and natural features along these routes. The storage tank would not be visible from the City-designated scenic roads. The views to the north, south, and west would be blocked by the hillside, and the view to the east would be substantially blocked by the new homes currently planned on Hoylake Court. No impacts to scenic resources within City-designated scenic corridors would be anticipated.
- c) The proposed storage tank could significantly impact views within the residential community of Eagle Ridge. Although the neighborhood has not yet been occupied, the prospective residents in the proposed houses on Hoylake Court would see the tank from the street and through their windows. The proposed tank location parcel has a steep grade of approximately 20 percent. Installation of the tank would require cutting substantially into the hillside. The cut could be as much as ____ [to be added] feet deep on the uphill side and would alter the view of the surrounding open space from adjacent parcels. The tank would be approximately 30 feet high, set back approximately ____ [to be added] from the street. The project would include measures to obscure the tank from view. Appendix B contains simulated views of the tank with landscaping. Mitigation Measures I.1 through I.6 would ensure that adequate landscaping design were employed, reducing the impact to neighboring views to less than significant levels.

The pump station would be located in a recreation area. Construction of an industrial pump station could impact the visual character of the park. However, the structure would be relatively small (approximately 1,000 square feet) and would be located adjacent to an existing City-owned structure constructed within the last five years. Nonetheless, the proposed building would impact the visual character of the park. Mitigation Measures I.8 would reduce this impact to less-than-significant levels.

d) The proposed storage tank is situated on a hillside and could present glare impacts depending on the construction material used. Mitigation Measure I.7 would reduce this potential impact to less-than-significant levels.

Mitigation Measures

- I.1) SCRWA should contact the Eagle Ridge developer and coordinate a strategy to provide landscaping which obscures the view of the tank within the neighborhood. This could include providing trees on adjacent residential lots between facing windows and the proposed tank.
- I.2) SCRWA should alert prospective buyers in the area of the plans to install the tank. This could be accomplished by placing signs on the property and by communicating with the developer or real estate company. If the properties are already sold, the owners should be informed of the project.
- **I.3)** Trees and native shrubbery species could be established on the tank site to obscure the view.
- I.4) Earth berms could be used to obscure the view of the tank from the new homes planned to the southeast.
- **I.5)** Fences or gates should be installed to limit access and obscure the view of the tank.
- I.6) The tank should be painted an appropriate color to reduce its obtrusiveness: either evergreen to match the oak trees or tan to match the summer hillside grasses.
- I.7) The storage tank would be constructed of materials that would not produce glare. The tank should be painted with non-glare paint to blend in to the surrounding hillside.
- **I.8)** The design of the pump station to be installed in Christmas Hill Park should be approved by the City of Gilroy Department of Community Services.

II.

II. AC	GRICULTURE RESOURCES:				
	In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.	Potentially Significant <u>Impact</u>	Less Than Significant With Mitigation Incorporation	Less Than Significant <u>Impact</u>	No <u>Impact</u>
Would that	he project: Convert Prime Farmland, Unique Farmland, or				
	Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				\boxtimes

	0)	or a Williamson Act contract?				\boxtimes
	c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				\boxtimes
Disc a)	The Plate im work supplies the	on: e City of Gilroy encompasses substantial amounts of an highlights the City's goals to maintain agricultural provements to the water distribution system would be ould be converted to non-agricultural use as a result of oply irrigation water to agricultural operations on eith constructed as part of the project would not impact agrated on recreational land and the storage tank within	lands withing consistent of the project er side of Upricultural land	n the city limi with these go . The pipelina was Creek. To and. The pun	ts. The proals. No farse would be the two facing station was	pposed mland able to lities to
b)	No	agricultural zoning or Williamson Act Contract land	s would be	impacted by t	he project.	
c)	im; rec	e pipeline easement was established in 1978. No more pact farmland or could result in conversion of farmlar yeled water could benefit land currently used for agrigation water.	nd to non-ag	gricultural use	s. Use of t	he
III.	ΑI	R QUALITY:				
				Less Than Significant		
	by pol	nere available, the significance criteria established the applicable air quality management or air lution control district may be relied upon to make following determinations. Would the project:	Potentially Significant <u>Impact</u>	With Mitigation Incorporation	Less Than Significant <u>Impact</u>	No <u>Impact</u>
	by pol	the applicable air quality management or air lution control district may be relied upon to make	Significant	Mitigation	Significant	
	by pol the a)	the applicable air quality management or air lution control district may be relied upon to make following determinations. Would the project: Conflict with or obstruct implementation of the	Significant	Mitigation	Significant	<u>Impact</u>
	by pol the a)	the applicable air quality management or air lution control district may be relied upon to make following determinations. Would the project: Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan? Violate any air quality standard or contribute to an	Significant	Mitigation Incorporation	Significant	<u>Impact</u>
	by pol the a)	the applicable air quality management or air lution control district may be relied upon to make following determinations. Would the project: Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan? Violate any air quality standard or contribute to an existing or projected air quality violation? Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed	Significant	Mitigation Incorporation	Significant Impact	<u>Impact</u>

e)	Create objectionable odors affecting a substantial		
	number of people?		\boxtimes

Discussion:

a) The Federal Clean Air Act and the California Clean Air Act mandate the control and reduction of air pollutants in California. Under these Acts, the U.S. Environmental Protection Agency (EPA) and the California Air Resources Control Board (CARB) have established ambient air quality standards for criteria pollutants including carbon monoxide, ozone, sulfur dioxide, nitrogen oxides, and particulate matter less than 10 microns across (PM₁₀).

The City of Gilroy is situated within the Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is the regional agency with jurisdiction for air resources in the Basin and maintains an air monitoring station in the City of Gilroy. The Basin is in non-attainment for ozone (O₃) and particulates (PM₁₀). Pursuant to the California Clean Air Act (CCAA), the BAAQMD prepared the Bay Area Clean Air Plan (CAP) in 1991. The CAP presents a plan to reach attainment of the ozone and PM₁₀ standards. The CAP was prepared in cooperation with the Bay Area Association of Governments (ABAG) and the Metropolitan Transportation Commission. Subsequent updates of this report have been prepared in 1994 and 1997.

The proposed project would not increase traffic volumes or install air pollutant emitting equipment. Construction activities would be short-term. Therefore, the project would not conflict with or obstruct the CAP.

b, c) The proposed project would not increase traffic volumes or install air pollutant emitting equipment. The pump station equipment would be run on electric power. The tertiary treated recycled water would not impact air quality. No impacts to air quality are anticipated from operations of the recycled water distribution system.

Construction activities would include excavations, soil removal, building construction, and delivery of construction materials. Approximately 3,000 cubic yards of soil would be cut from the hillside to accommodate the storage tank. To the extent feasible, much of the soil would remain on site to provide visual screening. Excess soil would be removed from the site and used as fill at other construction sites or disposed of in a local landfill as appropriate. Assuming that a maximum of 2,000 cubic yards of soil were to be removed from the site, approximately 100 haul trucks, each carrying 20 cubic yards, would be necessary. This amount of soil could be removed in a few days or over an extended period. The excavation would require a maximum of three diesel-powered machines operating at any given time. Excavations along the pipeline would require a single backhoe. Ground preparations at the pump station location would require a backhoe and dozer.

The City of Gilroy completed an EIR in 1999 for the City of Gilroy Draft General Plan. Air emissions including construction vehicle emissions and dust from earthmoving activities were identified as posing potentially significant impacts to air quality in the area during short-term construction activities. The EIR provided mitigation measures to reduce these impacts to less-than-significant levels. In addition, the O'Connell Ranch EIR provided mitigation measures to reduce air emissions impacts during construction. Mitigation Measures III.1 through III.3 reflect the measures identified in the City of Gilroy General Plan EIR and the O'Connell Ranch EIR. With incorporation of these mitigation measures, the proposed project would not significantly impact air quality during construction.

The geotechnical investigation conducted at the tank location site may find serpentine base rock material common to the region. Serpentine material contains asbestos fibers which could become airborne during excavation activities, potentially violating safety standards for workers and the public. Mitigation Measure III.4 would reduce this impact to less-than-significant levels.

d) Sensitive receptors include health care facilities, retirement homes, residences, schools, playgrounds, child care centers, and athletic facilities. Sensitive receptors near the proposed pump station include athletic fields, picnic areas, and the building owned by the City of Gilroy Department of Community Services adjacent to the pump station location which is sometimes used as a classroom by the City-sponsored Temporary Environmental Education Center (TEEC). The pipeline easement traverses many land uses with sensitive receptors including residential and recreation areas.

Sensitive receptors near the proposed tank location include the residential neighborhood under construction. Currently there are no residents in the area. The construction of the neighborhood is scheduled for completion by the end of 2000. Since operation of the proposed project would not involve air pollutant emitting equipment, no impacts to sensitive receptors would be anticipated.

Construction of the pump station at Christmas Hill Park and along the pipeline easement would involve one or two pieces of heavy, diesel-powered equipment operating at any given time between 7:00 AM and 7:00 PM. Given the short-term nature of the construction activities and the small scope, no air impacts to sensitive receptors would be anticipated. Construction of the storage tank is scheduled to be conducted prior to the completion of the residential neighborhood, thereby avoiding impacts to sensitive receptors.

e) The tertiary treated recycled water would not emit objectionable odors. Recycled water is commonly used for landscape irrigation and surface impoundments on golf courses and in public parks. The treatment process removes odor-causing sulfides and bacteria. No odor impacts are anticipated from the storage tank.

Mitigation Measures

Measures derived from the City of Gilroy General Plan EIR:

- **III.1)** SCRWA will implement dust reduction measures during construction including the following basic control measures:
 - Cover stockpiled soils overnight and weekends
 - Water all active construction areas at least twice daily
 - Cover all trucks hauling soil, sand, and other loose materials
 - Sweep all paved access roads daily if soil material is carried onto adjacent public streets
 - Replant vegetation in disturbed areas as quickly as possible
- III.2) SCRWA will implement the following measures during construction activities to reduce emissions from construction equipment
 - Idling time for all construction equipment will not exceed five minutes
 - All equipment will be adequately tuned and maintained in accordance with the manufacturer's specifications
 - When feasible, alternative fueled or electric vehicles shall be used
 - The minimum practical engine size will be used
 - Gasoline-powered equipment shall be equipped with catalytic converters where feasible

Measures derived from the O'Connell Ranch EIR:

III.3) Earthmoving activities will be suspended during periods of high wind

Measures developed for this analysis:

- III.4) If geotechnical reports indicate that excavation at the storage tank location would involve breaking into serpentine base rock or performing rock crushing operations, measures will be implemented to avoid dust emissions and ensure worker safety including the following:
 - To mitigate any potential health risks related to asbestos exposure, SCRWA will ensure that the contractor water the site during excavation at least twice a day or more frequently as necessary to eliminate visible dust emissions.
 - SCRWA will ensure that the contractor prepares and implements a Health and Safety Plan to meet applicable federal, state, and local environmental and worker-safety regulations including BAAQMD regulations regarding excavations in serpentine rock and the Occupational Safety and Health Administration (OSHA) regulations promulgated in the Code of Federal Regulations (CFR) 29, Section 1910.1001.

IV. BIOLOGICAL RESOURCES -- Would the project:

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special- status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		\boxtimes		
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife				

	corridors, or impede the use of native wildlife nursery sites?		\boxtimes
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		\boxtimes
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?		\boxtimes
-	on: plogical resources in the City of Gilroy include native	•	

Discu

a,b,c) oak woodland, and valley foothill riparian habitats. Table 2 identifies species which have been designated as threatened or endangered by federal or State authorities potentially occurring within or near the locations of project components. The City of Gilroy Draft General Plan has identified potential California Tiger Salamander habitat approximately one mile south of Christmas Hill Park. Uvas Creek supports some riparian habitat within the urbanized portions of Gilroy including along Christmas Hill Park. The City has identified "Important Riparian Habitat" along Uvas Creek north of the project site near Hecker Pass Road. No other sensitive habitat areas have been identified by the City of Gilroy within the city limits.

Table 2 Potential Special Status Species in the Gilroy Planning Area

Species	Common Name	Status
Athene cunicularia	Burrowing Owl	FSC, CSC
Clemmys marmorata	Western Pond Turtle	FSC, CSC
Ambystoma californiense	California tiger salamander	FC, CSC
Rana aurua draytonii	California red-legged frog	FT, CSC
Scaphiopus hammondii	Western spade foot toad	FSC,CSC
Oncorhyncluis mylaiss	Steelhead	FT
Balsamorhiza macrolepis var. macrolepis	Big-scale balsamroot	CNPS 1B
Streptanthus albidus ssp. Albidus	Metcalf Canyon jewelflower	FE, CNPS 1B
Streptanthus albidus ssp. Peramoenus	Most beautiful jewelflower	FC, CNBS 1B
Dudleya setchellii	Santa Clara Valley dudleya	FE, CNPS 1B

Source, City of Gilroy Draft General Plan, 1999

U.S. Fish and Wildlife Service

FSC - federal species of concern

FT - federal threatened

FC – federal candidate

FE - federal endangered

California Department of Fish and Game

CSC - California species of concern

CNPS 1B - California Native Plant Society List 1B (rare threatened or endangered in California and elsewhere)

Each of the project components would be situated on pre-disturbed property. No trees would be removed as a result of the project. The Christmas Hill Park site is currently used as a staging area and storage yard for the City of Gilroy and was recently graded upon the establishment of the Ranch Site Addition. Uvas Creek runs along the eastern edge of the park approximately 200 feet from the proposed pump site location and would not be affected by installation activities due to the distance from the site. Therefore, installation of the pump station would not impact local biological resources.

The storage tank location has been cleared as part of the Eagle Ridge development grading plan as shown in the photograph in Figure 2. The Subsequent Environmental Impact Report prepared for the Eagle Ridge development identified significant, unavoidable impacts to biological resources primarily associated with the loss of grassland and woodland habitats including the removal of up to 700 trees within the development area. Mitigation measures included providing salamander habitat within the development.

No vegetation currently exists on the proposed tank site, although the developer has recently hydroseeded the area to prevent erosion during the rainy season. Figure 2 shows the current condition of the tank site location. The site is at the border of the new residential area and the coastal oak woodland in the surrounding hills. Since the property has already been cleared as part of the Eagle Ridge development, installation of the storage tank would not impact biological resources.

The existing recycled water pipeline, installed in 1978, begins at the wastewater treatment plant and traverses the urbanized areas of Gilroy as shown in Figure 1. The retro-fit activities proposed by the project would require "pothole" excavations along portions of the pipeline to replace valves and fittings. Much of the pipeline easement is composed of disturbed land with little sensitive biological habitat. East of Uvas Creek, the easement lies within the berm of a flood control channel, which is periodically cleared of vegetation as a maintenance activity. The pipeline crosses under Uvas Creek at Christmas Hill Park, continues to the proposed pump station location, and splits into two lines near the Eagle Ridge development. One branch crosses Uvas Creek again and terminates at the Gilroy City Golf Course. The other branch terminates at an open reservoir west of the Eagle Ridge development and south of Uvas Creek (See Figure 1).

If the portion of the pipeline beneath Uvas Creek needs to be accessed, the excavation activities could impact riparian habitat. The riparian habitat in the portions of the creek where the existing pipeline crosses is of mixed quality. Flood control measures have modified the banks with rip rap in some stretches of the creek and the vegetation includes non-native species of trees and groundcover. If excavation were to occur within the creek bed, permits would be required from the RWQCB, the California Department of Fish and Game (CDFG), and the US Army Corps of Engineers.

The City of Gilroy has identified "Important Riparian Habitat" along Uvas Creek further north near Hecker Pass Road, but the pipeline would not impact this area. Nonetheless, Mitigation Measures IV.1 and IV.2 would reduce potential impacts to riparian habitat to less-than-significant levels.

- d) The project would not interfere with the migration or movement of wildlife. No impacts would be anticipated.
- e, f) As discussed above, the City of Gilroy has identified areas of sensitive habitats within the city limits. The proposed project would not impact these areas. Neither would the project be located

near or impact established Habitat Conservation Plans or Natural Conservation Community Plans. In addition, no trees or undisturbed habitat would be removed or otherwise impacted.

Mitigation Measures

- IV.1) Pipeline excavations within the riparian habitat along Uvas Creek should be avoided if possible. If excavations within the Uvas Creek flood zone and riparian area are essential, impacted habitat should be replaced upon completion of the project to match the preconstruction conditions.
- **IV.2)** Prior to excavating within the riparian corridor of Uvas Creek, SCRWA will ascertain whether the specific excavation activities would involve placing fill material within the streambed, prompting the need to obtain the following permits:
 - Section 404 of the Clean Water Act permit issued by the Army Corps of Engineers
 - Section 401 of the Clean Water Act certification issued by the RWQCB
 - Streambed Alteration Agreement form the CDFG pursuant to Section 1601 and 1603 of the California Fish and Game Code

Lees Than

SCRWA will obtain written acknowledgement from the CDFG, confirming that excavation activities within the riparian corridor would not require permitting.

V. CULTURAL RESOURCES -- Would the project:

		Potentially Significant	Significant With Mitigation	Less Than Significant	No
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	_Impact	Incorporation	<u>Impact</u>	Impaci
b)	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?			\boxtimes	
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
d)	Disturb any human remains, including those interred outside of formal cemeteries?				\boxtimes

Discussion:

The project would not cause substantial adverse change to historical resources. No structures would be demolished as a result of the project. The storage tank location on the hillside has no existing improvements. The site has been cleared of vegetation as part of the Eagle Ridge development construction.

The pump station would replace a small 1,500 square-foot fenced-in storage yard currently used by the City as a staging area. The yard is associated with a small structure owned by the City of Gilroy and currently used periodically as a classroom. The structure was recently constructed as part of the Ranch Site Addition to Christmas Hill Park and is not an historic resource.

The existing pipeline is located within an easement held by SCVWD. The project would not excavate previously undisturbed areas as part of the pipeline retrofit. Therefore, no impacts to historical resources are anticipated.

b) The Christmas Hill Park area was fully surveyed in 1992 as part of the Ranch Site Addition. The survey documented several sites within the Ranch Site Addition, but none within the project site itself. The Initial Study prepared for the Christmas Hill Park expansion and Uvas Creek Park Preserve Master Plan states that areas around Uvas Creek could contain artifacts since these areas have been used extensively by Native Americans and early settlers. However, the small extent to which the proposed project would excavate soil in Christmas Hill Park would make encountering artifacts highly unlikely. Nonetheless, Mitigation Measure V.1 would reduce potential impacts to less-than-significant levels.

As part of the EIR prepared for the Eagle Ridge development in 1992, cultural resources surveys were conducted of the entire area proposed for development, encompassing 877 acres. This area includes the proposed storage tank location. The surveys verified the presence of three sites of archaeological significance within the boundaries of the development. The EIR provided mitigation measures to avoid impacting these areas. Although the exact locations of these sites are confidential, the site chosen for the storage tank avoids them, according to information provided in the O'Connell Ranch EIR. Therefore, impacts to archaeological resources at the Eagle Ridge site are not anticipated.

- c) The project components each occur in pre-disturbed areas. The project would not impact unique paleontological resources. Installing the storage tank would require cutting into the hillside and removing approximately 3,000 cubic feet of soil. The excavation would not affect a unique geologic feature. The impact would be less than significant.
- d) The project would not impact known cemeteries, and no evidence of burials exists in the project locations. The pipeline excavation activities would occur within previously disturbed soil. The possibility of encountering archaeological artifacts or burials in the excavations at the storage tank site and in Christmas Hill Park is remote. Nonetheless, Mitigation Measure V.1 would minimize potential impacts.

Mitigation Measure

V.1) If cultural resources are encountered during construction of the project, the contractor will avoid altering the materials and their context until a qualified archaeologist has evaluated the situation. Project personnel will not collect cultural resources. Procedures for stopping construction in the event that cultural resources are exposed will be part of the project plans and specifications. The qualified archaeologist will determine the best course of action.

VI. GEOLOGY AND SOILS -- Would the project:

		Potentially Significant _Impact_	Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impac</u>
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:		\boxtimes		
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special				
	Publication 42. ii) Strong seismic ground shaking?				\boxtimes
	iii) Seismic-related ground failure, including liquefaction?iv) Landslides?		\boxtimes		
b)	Result in substantial soil erosion or the loss of topsoil?		\boxtimes		
c)	Be located on strata or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or		5 7		
	collapse?	Ц	\boxtimes		Ц
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?			\boxtimes	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				\boxtimes

Less Than

Discussion:

a,b,c) The topography of Santa Clara County consists of three principle physiographic features: the Santa Clara Valley, the Santa Cruz Mountains, and the Diablo Range. The existing recycled water pipeline extends from the valley floor at an elevation of roughly 170 feet to the eastern edge of the Santa Cruz Mountains at an elevation of approximately 400 feet. Soil types vary with topography and consist of gravels, silts, and clays of Quaternary age. The City of Gilroy General Plan EIR identifies the eastern slopes of the Santa Cruz Mountains as characterized by alluvial deposits of fine grained sand, silt, and clay. Groundwater elevations are within 20 to 50 feet below ground surface.

The Gilroy area is traversed by three major fault lines running roughly northwest to southeast. They include the San Andreas Fault to the west within the Santa Cruz Mountains, the Sargent Fault along the eastern edge of the Santa Cruz Mountains, and the Calaveras Fault to the east of Gilroy on the valley floor. None of the project components would be situated within a designated fault rupture zone as identified in the Alquist-Priolo Earthquake Fault Zone Maps (maps Gilroy R82 and Chittenden R82, Division of Mines and Geology Special Publication 42). However, the area is located within the seismically active region of northern California and could be subject to seismic hazards, including strong ground shaking, liquefaction, and landslides. The City of Gilroy General Plan EIR identifies the eastern Santa Cruz Mountains as having a moderate potential for liquefaction, lurching and lateral spreading, and a high potential for severe ground shaking. Official seismic hazard maps pursuant to the Seismic Hazard Mapping Act of 1990 have not been prepared for the Gilroy area.

The project would not include habitable structures and is limited to installation of water distribution facilities. The proposed location for the pumping station is situated on the historic flood plain of Uvas Creek. Shallow groundwater and unconsolidated soils in the area could allow for a high liquefaction hazard. The proposed storage tank location is on a steep hillside. Strong ground shaking could induce landsliding and ground failure in the cut area accommodating the tank pad. The geotechnical survey conducted for the Eagle Ridge development in 1988 concluded that the natural slopes are susceptible to landslides. As part of the project, the excavated hillside would be reinforced to withstand seismic and drainage pressures. The City of Gilroy Department of Building Safety will review project designs prior to construction to ensure adequate protection against landslides is provided.

In addition, extreme earth movement could impact the integrity of the buried pipeline causing system failure or rupture. Implementation of Mitigation Measures VI.1 through VI.3 would reduce potential impacts from geologic impacts to less-than-significant levels.

Construction activities for each aspect of the distribution system installation could increase erosion potential and sediment loads in local receiving waters. In addition, the completed storage tank cut into the hillside could be susceptible to erosive forces for the life of the project. Mitigation Measures VI.4 and VI.5 would reduce potential impacts from erosion to less-than-significant levels.

- d) The geotechnical survey conducted for the Eagle Ridge development in 1992 indicated that expansive soils occur in localized areas. As part of the project, prior to construction, geotechnical investigations will be conducted to determine whether expansive soils exist at the tank location. If found, they will be removed and replaced with certified fill material to adequately protect the proposed structures. No impacts would be anticipated.
- e) No septic tanks are proposed in the project. Therefore, no impacts are anticipated.

Mitigation Measures

- VI.1) Prior to installing the storage tank, a geotechnical survey will be conducted to determine appropriate design and construction methods on the hillside. The tank design will comply with the Uniform Building Code and the American Water Works Association (AWWA) design guidelines for hillside construction in a seismically active area.
- VI.2) The pipeline will be equipped with emergency shut-off valves.

- VI.3) Proposed facilities will be incorporated into SCRWA's operations and maintenance program which includes contingencies for catastrophic failures.
- VI.4) Design of the storage tank location will include a drainage plan to minimize erosion potential on the steep hillside for the life of the project. The design will be submitted to the City of Gilroy Department of Building and Safety for approval prior to installation.

From City of Gilroy General Plan EIR:

VI.5) The project grading plan shall include an improved drainage and erosion control plan to minimize impacts from erosion and siltation during grading. This plan should conform to all standards adopted by the City of Gilroy. This plan should include measures such as restricting grading to the dry season when possible, protecting all finished graded slopes from erosion, protecting downstream storm drainage inlets from sedimentation, and use of silt fencing to retain sediment in the project site.

After construction is completed all exposed soils shall be seeded or vegetated with City approved seed mix and native vegetation to ensure that soils are stabilized.

VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant _Impact_	No <u>I</u> mpact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		· _		
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			\boxtimes	
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			\boxtimes	
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use				

		airport, would the project result in a safety hazard for people residing or working in the project area?				\boxtimes
	f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	. 🗆			\boxtimes
	g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				\boxtimes
	h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				\boxtimes
Disc a)	Th or	on: e proposed project includes upgrade of the existing rec storage of hazardous materials would be associated wi ould not present hazards to the public through the routi	ith the opera	ition of the sy	ystem. The	project
	Re- Re- rec	e recycled water transported through the pipeline to the gional Water Quality Control Board (RWQCB) Centrol Clamation Requirements Order No. 98-052. This Order yellow water for specific land applications. Users are related application methods outlined in the MWRR anticipated from the use of reclaimed water.	al Coast Reger authorize required to c	gion through s the SCRWA conform with	the Master A to distrib the use lim	Water ute nitations
b)	rup eas Cre pul	tential upset of the proposed project could include pipe of ture could result in releasing tertiary treated water at a sement. The released water would follow natural drain seek. As noted above, released water would be treated olic health risk. The likelihood of such a release is min nificant.	any point alo nage pattern to a tertiary	ong the eight s and flow ev level and wo	mile pipeli entually to ould not pos	ine Uvas se a
c)	the mar the	e pump station proposed for Christmas Hill Park would acture currently used as a classroom by the City of Gil operation of the pump station would impact the neighterial would be stored at the pump station. Similarly, City of Gilroy, but no impacts to public health would uld convey tertiary treated water.	roy. Howeveloring land the existing	ver, no hazaro uses since no underground	ds resulting ot hazardou l pipeline tr	from is averses
d)	exc ben bee	e storage tank location has not been previously developed avated soils would be expected except for the potential leath the surface. The Christmas Hill Park location was recently converted to recreational uses. No hazardo leath the pump station location.	al for asbest as historical	os fibers with ly agricultura	nin serpenti Il land but l	nas

d)

The underground pipeline traverses the city and passes many different current and historic land uses. Hazardous materials in soils could be encountered during retrofit excavations. However, the excavated soils would be predominantly fill material placed during the installation of the pipeline in 1978. Nonetheless, Mitigation Measure VII.1 would provide for adequate worker protection. Mitigation Measure III.4 (Air Quality) also provides for protection against the possibility of encountering asbestos containing rocks.

- e, f) The proposed project would not interfere with airport operations. The project is not located within two miles of a public or private airport. The closest airport is the South County Airport located approximately four miles north along State Highway 101.
- g) The proposed project would not expose people to wildfire risks. No impacts are anticipated.

Mitigation Measures

VII.1) Contractor specifications shall include measures requiring the preparation of a project-specific Health and Safety Plan. The Health and Safety Plan will include contingencies for the use of hazardous materials including the potential of encountering asbestos-containing rock as identified in Section III. Air Quality.

VIII. HYDROLOGY AND WATER QUALITY -- Would the project:

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant _Impact	No <u>Impact</u>
a)	Violate any water quality standards or waste discharge requirements?				\boxtimes
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there should be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				\boxtimes
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				\boxtimes
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a				

		manner which would result in flooding on- or off-site?			\boxtimes	
	e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems?				\boxtimes
	f)	Otherwise substantially degrade water quality?			\boxtimes	
	g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				\boxtimes
	h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				\boxtimes
	i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				\boxtimes
	j)	Inundation of seiche, tsunami, or mudflow?				\boxtimes
Disc a)	The enf not req Character Tit. Lar req rec.	on: e Department of Health Services (DOHS) is charged we forcing uniform statewide reclamation criteria to ensure be detrimental to public health. The DOHS established uirements, and treatment reliability criteria for reclamations apper 3, of the California Code of Regulations (Title 22) le 22 regulations address treatment requirements for the discape Irrigation, Recreational Impoundments, and Inquirements differ for each type of reuse based on the explained wastewater under each type of use. The DOHS has produced Guidelines for Use of Reclaimed res. The guidelines focus on application and managements.	that the used water qualition operated, which were types of dustrial Use pected degrade water, where the water, where the water, where the water	se of the reclar ality criteria, ality criteria, ions in Title as promulgate freclaimed wes. The treat ree of human mich apply to	aimed water treatment p 22, Division ted in 1978 vater uses: ment contact wi	r will process n 4, . The th
		ter uses. General requirements include posting signs to				

required in some cases), marking reclaimed water distribution and transmission system piping to indicate that it contains reclaimed water, and other requirements designed to ensure that reclaimed water use does not affect public health.

reclaimed water is in use, confining reclaimed water to authorized use areas (setbacks may be

State of California, Department of Health Services, Environmental Management Branch, Guidelines for Use of Reclaimed Water, June 10, 1988

The recycled water transported through the pipeline to the proposed storage tank is permitted by the Regional Water Quality Control Board (RWQCB) Central Coast Region through the Master Water Reclamation Requirements Order No. 98-052. This Order authorizes the SCRWA to distribute recycled water for specific land applications. Users are required to conform with the use limitations and required application methods outlined in the MWRR. Compliance with the Order would minimize impacts to water quality.

- b) The proposed project would not increase demand for groundwater or increase pumping that would effect groundwater levels. The increased use of recycled water in the Santa Clara Valley would be a beneficial impact to the groundwater basin by providing additional water supplies to the region. Water recycling is encouraged by the California Department of Water Resources (California Water Code, Section 13512) to reduce demands on potable water, including groundwater.
- c,d,e) The storage tank installation would include a large cut into the existing hillside. The location is not within a gully or natural drainage feature but follows a uniform slope of approximately 20 percent, dropping approximately 20 to 30 feet over the length of the site. The installation of the tank would create approximately 4,000 square feet of impervious surface. Installation of the tank would include providing drainage infrastructure for the tank pad area, with drainage routed to existing drainage courses. The drainage infrastructure would integrate with the drainage plan for the Eagle Ridge development. No impacts to surface drainage in the area would be anticipated due to the limited amount of impervious area to be added and the relatively small additional runoff from the tank.

The pump station location would create approximately 1,000 square feet of impervious surface on the flat Christmas Hill Park site. Storm drains installed during the construction of the Ranch Site Addition of Christmas Hill Park drain rain water to Uvas Creek. The pump station would not significantly increase impervious surfaces or exceed drainage capacities. The size of the construction areas would be less than five acres. Therefore, contractors would not be required to submit Stormwater Pollution Prevention Plans to apply for coverage under the State-wide Construction NPDES permit. However, it is recommended that contractors use best management practices (BMPs) to ensure that impacts associated with erosion are avoided. Mitigation Measure VIII.2 provides for the implementation of appropriate BMPs to reduce potential erosion impacts.

f) The long-term use of recycled water for landscape irrigation poses potential impacts to surface water and groundwater quality. Typical water quality concerns for reclaimed water application sites include the potential of elevating nitrate levels in underlying groundwater and of increasing salt build-up in the root zones. Elevated salt build up over time can be harmful to turf grasses and associated park and golf course vegetation, forcing irrigators to stop using reclaimed water. Table 3 summarizes the water quality parameter limits for the recycled water program contained in the MWRR issued by the RWQCB. The MWRR is included as Appendix A of this report.

In addition to these parameters, the MWRR establishes limits for turbidity, total coliform concentrations, and chlorine contact times. Effluent generated by the SCRWA tertiary treatment facilities meets or exceeds the requirements of the MWRR. (See Appendix A)

The Central Coast RWQCB identifies beneficial uses of the Gilroy-Hollister Valley Groundwater Basin. Beneficial uses of the Basin include drinking water supply. **Table 4** summarizes the drinking water standards and groundwater objectives for total dissolved solids (TDS) and nitrates.

Table 3
Master Water Reclamation Requirements Disinfected Tertiary Recycled Water Limits

Parameter	Daily Max	30-day Mean
BOD (mg/l)	20	10
Total Suspended Solids (mg/l)	20	10
Nitrate as N (mg/l)	10	5

Source: RWQCB, Master Water Reclamation Requirements, Order No. 98-052

The nitrogen in reclaimed water is generally beneficial to the surface vegetation, reducing the need for routine fertilizing. However, some nitrogen not used by the vegetation may penetrate beneath the root zone and enter the groundwater. This effect also occurs when inorganic fertilizers are routinely applied to landscaping. The effect is a result of landscape nutrient application irrespective of the use of reclaimed water. Landscape management practices can reduce the potential for excessive amounts of nitrogen permeating the groundwater through measured fertilizing practices. Generally, 50 to 60 percent of the applied nitrogen in reclaimed effluent is utilized by the plant crop or turf, 15 to 25 percent of the nitrogen is lost to volatilization and denitrification, and generally less

Table 4
Water Quality Objectives

	Drinking water standard (a)	Groundwater Quality Objective (b)
TDS (mg/l)	 500	1,200
Nitrate as N (mg/l) (c)	10	5

Source: RWQCB, Central Coast Region, Water Quality Control Plan; Title 22, Section 64449

- (a) TDS has a recommended secondary drinking water standard from California Code of Regulations (CCR) Title 22 Section 64449, nitrate has a primary drinking water standard from CCR Title 22 Section 64431
- (b) Groundwater objectives from Central Coast RWQCB Water Quality Control Plan for Pajaro River Sub-basin at Hollister.
- (c) Measured as nitrogen

than 10 percent is leached beyond the root zone². The MWRR issued to SCRWA by the RWQCB restricts nitrogen in the recycled effluent to 5 mg/l as a 30-day mean. This is equivalent to the groundwater quality objectives established by the RWQCB and is less than the primary drinking water standard for nitrogen. As such, compliance with this objective would be protective of beneficial uses within the basin. Recycled effluent currently delivered by SCRWA is in compliance with this limitation, and supplies delivered under the proposed project will continue to comply with

² O'Connell Ranch Subsequent Environmental Impact Report, Revised Draft, 1992, Appendix I

this limitation. Therefore, potential impacts associated with nitrate loading would be less than significant.

The MWRR does not contain a recommended total dissolved solids (TDS) limit. Assuming that the effluent contains 600 to 700 mg/l TDS, salt build-up in the root zone of turf grass could occur over time. Elevated salt build up in the root zone can impair the health of irrigated plants and can force water users to stop irrigating with recycled water. Landscape management practices can prevent salt build up by providing adequate drainage beneath the root zone and by maintaining a low sodium adsorption rate (SAR)³. The SAR is a measurement of the recycled water's effect on soil permeability based on sodium concentrations. Soil permeability is reduced when water high in sodium is used. Lower SAR values can be accomplished by adjusting the relative concentrations of the cations sodium, calcium, and magnesium within the recycled water.

Recycled water users can employ irrigation management techniques to reduce salt build up including the following:

- Planting salt-tolerant plants,
- Applying extra water to leach excess salt,
- Irrigating more frequently to maintain a higher soil moisture content,
- Modifying soil to improve water percolation, or
- Installing artificial drainage to improve leaching

Mitigation Measure VIII.1 provides measures to reduce impacts of elevated TDS concentrations to less-than-significant levels. The effluent from the SCRWA tertiary treatment facilities meets the limitations for all constituents listed in the MWRR issued by the RWQCB. Therefore, the project would not impair water quality.

g,h,i) Neither the pump station nor the storage tank would be located within the 100-year flood plain as designated by the Federal Emergency Management Agency (FEMA) Flood Insurance Maps (Map # 0603400003D). The Christmas Hill Park area is historically associated with the Uvas Creek flood plain. However, flood control improvements including the Uvas Creek dam have reduced the potential for flooding in the project area considerably. In the advent of catastrophic dam failure of the Uvas Creek Dam, the pump station building could potentially be inundated by flood waters. The likelihood of this occurring is remote.

The pipeline is installed underground and therefore would not be impacted by flooding except that access during a flood would be restricted. The proposed project would not involve placing housing within a flood plain. Therefore no impacts from flooding would be anticipated.

Failure of the storage tank could release large quantities of recycled water with the potential to affect residences immediately down-gradient. The two potable water tanks located approximately 500 feet uphill from the proposed tank could exacerbate the hazard should failure occur simultaneously. The residential development, in compliance with the City of Gilroy Draft General Plan policies for hillside developments, has retained natural drainage features of the surrounding undeveloped hills. Should catastrophic failure occur, the released water would follow natural drainage patterns and could impact homes immediately down-gradient on Hoylake Court. The tank

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³ IBID, Appendix I

would be designed to withstand seismic and geologic hazards in compliance with the California Uniform Building Code and the American Water Works Association (AWWA) design standards. The likelihood of a catastrophic failure is remote. Mitigation Measure VIII.4 would ensure that the home owners and prospective buyers are informed of the project.

The pipeline crosses Uvas Creek in two locations. Accessing the pipeline in these places could be impacted by rain induced flooding. Limiting construction activities within the creek bed to summer months as provided in Mitigation Measure VIII.3 would reduce this impact to less-than-significant levels.

j) The project area is not subject to seiches, tsunamis, or mudflows. No impacts are anticipated.

Mitigation Measures

Measure derived from the Water Reclamation Planning Study:

- VIII.1) If the recycled water exhibits elevated sodium concentrations, SCRWA should promote the following management techniques among users as necessary to reduce salt build-up in surface soils:
 - Planting salt-tolerant plants,
 - Applying extra water to leach excess salt,
 - Irrigating more frequently to maintain a higher soil moisture content,
 - Modifying soil to improve water percolation, or
 - Installing artificial drainage to improve leaching

Measures derived from this analysis:

- VIII.2) For each portion of the project, SCRWA will ensure that the construction contractor implements appropriate erosion control measures which could include scheduling to avoid the rainy season, collecting dust-control water runoff, providing storm drain outlet protection using straw bales, maintaining slope stabilization, and preserving existing vegetation as described in the California Storm Water Best Management Practices Handbook. These measures would be incorporated in the grading plan described in Mitigation Measure VI.5.
- VIII.3) If excavations are necessary to access the pipeline within the Uvas Creek flood zone, construction activities will be performed within the summer months.
- VIII.4) SCRWA will ensure that the placement, contents, and volume of the proposed storage tank is disclosed to the current or prospective homeowners adjacent to and down-gradient from the proposed tank location.

IX. LAND USE AND PLANNING – Would the project:

		Potentially Significant <u>Impact</u>	Significant With Mitigation Incorporation	Less Than Significant <u>Impact</u>	No <u>Impact</u>
a)	Physically divide an established community?				\boxtimes
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				\boxtimes
c)	Conflict with any applicable habitat conservation plan or natural communities conservation plan?				\boxtimes

Less Than

Discussion:

a,b) The project would not physically divide a community or conflict with local land use plans or policies. The pipeline follows an existing easement held by the SCVWD. Upgrading the pipeline would not conflict with neighboring land uses. The installation of the pump station at the Christmas Hill Park location would not conflict with the recreational uses of the area. The area is currently zoned PF – Public Facility. SCRWA would purchase the footprint of the building from the City of Gilroy. The pump station would be a small service building at the edge of the park area near the parking lot. No conflicts with zoning or land uses would be anticipated.

The installation of the storage tank in the residential area at the Eagle Ridge development would not conflict with approved land uses for the area. The identification of the tank location was a condition of approval for the Eagle Ridge development, providing close proximity storage of irrigation water for the new golf course. The tank site location is zoned RH – Residential Hillside. The storage tank would be consistent with the City of Gilroy zoning code for the RH zone⁴. The project would require no variances or conditional use permits. No impacts to land use would be anticipated.

The EIR prepared for SCRWA's Long Term Wastewater Management Plan identified water reclamation as an integral part of each alternative analyzed. The EIR prepared for the Eagle Ridge development (O'Connell Ranch EIR) identified the use of reclaimed water delivered through the existing pipeline as a means of reducing the demand for potable water. Water recycling is an effective means of reducing potable water demand and of providing additional effluent discharge capacity. Finally, the project is identified in the Water Reclamation Planning Study prepared for SCRWA in 1995 as an efficient and cost effective opportunity to improve recycled water delivery within the project area.

⁴ per Melissa Durkin, City of Gilroy Planning Department, January, 2000

c)		ne proposed project would not conflict with any habita immunities conservation plan (NCCP). No impacts are			P) or natura	1
х.	M	INERAL RESOURCES – Would the project:	Potentially Significant <u>Impact</u>	Less Than Significant With Mitigation Incorporation	Less Than Significant <u>I</u> mpact	No Impact
	a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes
	b)	important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				\boxtimes
Disc a)		on: le proposed project would not impact known mineral r	esources. I	No impacts ar	e anticipate	d.
b)	wi	ne proposed project would not conflict with local general the regard to mineral resources, and would not limit the pacts are anticipated.				
XI.	NO	OISE – Would the project result in:	Potentially Significant _Impact_	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
	b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
	c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			\boxtimes	
	d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			\boxtimes	
	e)	For a project located within an airport land use plan or, where such a plan has not been adopted,				
		40				

	airport, would the project expose people residing or working in the project area to excessive noise levels?		\boxtimes
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?		\boxtimes

Discussion:

a,b,c,d) Noise thresholds established in the City of Gilroy Draft General Plan are summarized in **Table 5**. Action 26.A of the City of Gilroy Noise Ordinance regulates noise levels in the City.

Table 5
City of Gilroy Draft General Plan Permissible Maximum Outdoor and Indoor Noise Levels

Land Use Category	Max. Outdoor L _{DN} (dBA)	Max. Indoor L _{DN} (dBA)
Residential	60	45
Commercial	65	61
Industrial	76	OSHA Standards

Source: City of Gilroy Draft General Plan

L_{DN} = Day-Night Noise Level

(dBA) = decibels as measured with "A-weighting"
OSHA = Occupational Safety and Health Administration

Construction activities would generate additional short-term noise above ambient levels. Construction at the storage tank location should take approximately six weeks and would be completed prior to habitation in the surrounding residential development currently under construction. Construction of the pump station should begin in the Fall of 2000 and be completed in the Spring of 2001. The pipeline retrofit excavations are expected to begin in the Fall of 2000 and continue to August 2001. Construction at each retrofit location along the pipeline would last approximately one week. Although noise impacts are expected to be minimal, adherence to mitigation measures provided in the City of Gilroy General Plan EIR for short-term construction noise would ensure that noise impacts would be less than significant.

No noise impacts are anticipated for long-term operation of the proposed project. The pump station would be the only operational noise-generating element. No sensitive receptors exist within a 500-foot radius of the proposed site other than the adjacent building owned by the City of Gilroy that is sometimes used as a classroom. The pump station would not increase indoor noise levels at this building. Mitigation Measure XI.2 would ensure that impacts from operational noise generated by the pump station would be less than significant.

e,f) The project would not subject people to excessive noise or be located within two miles of an airport.

Mitigation Measure

Measure derived from the City of Gilroy General Plan EIR

- **XI.1** As part of normal City review and approval procedures for future projects the following measures should be incorporated to mitigate construction noise:
 - a) Limit construction activity to weekdays between 7:00 AM and 7:00 PM and Saturdays and holidays between 9:00 AM and 7:00 AM, with no construction on Sundays
 - b) Require that all internal combustion engine-driven equipment are equipped with mufflers which are in good condition and appropriate for the equipment
 - c) Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area

Measure derived from this analysis

XI.2 The pump station would be sound-insulated, designed to prevent appreciable increase to night-time ambient noise levels at a distance of 50 feet.

XII. POPULATION AND HOUSING -- Would the project:

			Less Than Significant		
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example,	Potentially Significant <u>Impact</u>	With Mitigation Incorporation	Less Than Significant <u>Impact</u>	No <u>Impact</u>
	through extension of roads or other infrastructure)?			\boxtimes	
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes
c)	Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?				\boxtimes

Discussion:

a) The objective of the proposed project is to maximize the existing recycled water system and to improve service reliability. Upgrading the existing distribution system would increase the maximum capacity of the distribution system from current levels of less than 2 mgd to a maximum of 3 mgd. Although the tertiary treatment and distribution facilities at the SCRWA WWTP would have an annual average capacity of 3 mgd, they would not provide consistent discharge capacity due to seasonal demand trends for recycled water. During the winter months, need for irrigation is

reduced or eliminated. This type of seasonal discharge capacity can not be relied on to accommodate growth in the region.

The Long Term Wastewater Management Plan EIR prepared by SCRWA in 1990 examined specific treatment and disposal projects to increase wastewater treatment capacity. Installation of tertiary treatment facilities was included in the plan. The plan concluded that the treatment plant expansion could be seen as growth-accommodating through the elimination of wastewater treatment as a constraint to growth. However, the expansion was seen as a beneficial alternative since capacity needs could be phased according to changing growth trends. Haphazard development centered around available treatment facilities would be minimized.

The proposed project does not in and of itself provide additional disposal capacity, but rather maximizes the efficiency of the existing system, which was originally proposed and analyzed in the Long Term Wastewater Management Plan EIR. The project is intended by SCRWA, SCVWD, and the City of Gilroy to promote water recycling as a water management tool to maximize benefits to both water supply and wastewater treatment in the Gilroy area. The project would not influence growth in the region.

b,c) The project would not displace housing or necessitate replacement housing. No impacts are anticipated.

XIII. PUBLIC SERVICES --

			Less Than		
			Significant		
		Potentially	With	Less Than	
		Significant	Mitigation	Significant	No
		<u> Impact</u>	Incorporation	_Impact_	<u>Impact</u>
a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
	Fire protection? Police protection?				\boxtimes
	Schools?				\boxtimes
	Parks?			\boxtimes	
	Other public facilities?			П	\boxtimes

Discussion:

a) The project would not impact fire protection, police protection, or schools. The pumping station located on Christmas Hill Park would not significantly impact the recreational uses of the park since the building would be on the edge of the park near the parking lot. No mitigation measures would be necessary.

XIV. RECREATION --

			Potentially Significant <u>Impact</u>	Significant With Mitigation Incorporation	Less Than Significant <u>Impact</u>	No <u>Impact</u>
	a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				\boxtimes
	b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			\boxtimes	
Discu a, b)	The courince cur	on: e project would allow for the distribution of irrigation e golf course currently uses this water for irrigation. I arse would be beneficial by reducing demand on other rease the use of existing parks or recreational facilities rent usage. The pump station located within Christma ruption during construction, but would not impede use	Providing u sources of s, but rather as Hill Park	ninterrupted s water. The p r provide serv would create	ervice to the roject would ice to main minor, sho	ne golf d not tain the ort-term
XV.	loc	ation within an existing City-owned storage yard. ANSPORTATION / TRAFFIC Would the	•			
XV.	loc	ation within an existing City-owned storage yard.	·	Less Than		
XV.	loc	ation within an existing City-owned storage yard. ANSPORTATION / TRAFFIC Would the	Potentially Significant <u>Impact</u>		Less Than Significant <u>Impact</u>	No Impact
XV.	loc	ation within an existing City-owned storage yard. ANSPORTATION / TRAFFIC Would the	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No
XV.	TR pro	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant <u>Impact</u>	No
XV.	TR pro	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)? Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant Impact	No

	d)	Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes
	e)	Result in inadequate emergency access?				\boxtimes
	f)	Result in inadequate parking capacity?				\boxtimes
	g)	Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				\boxtimes
Discu a, b)	The act Rick to I The wo	e project operation would not impact traffic in the Gil ivities at the storage tank location would temporarily alge development and along Santa Teresa Boulevard. The removed from the hillside, some would be transported trips could be performed in a few days or over a pull be less than significant. Instruction activities along the pipeline easement could be croachment permits from the Department of Transport instruction activities within designated State Highways assures such as lane control and the use of flag men we use potential impacts to less-than-significant levels.	increase true Of the estinated off site eriod of we disrupt tratation (Calita. The use of the control of the co	ack traffic with mated 3,000 control of the material of the ma	thin the Eag tubic yards of the 100 tructor rease to training the control ic locations be required affic control	le of soil k trips. ffic for
c) d,e,f,;	g) T	e project would not impact air traffic. The project would have no impact on road design feature transportation policies.	ures, emerg	ency access,	parking, or	
XVI.	UT	ILITIES AND SERVICE SYSTEMS Would project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant <u>Impact</u>	No <u>Impact</u>
	a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
		Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				×
	c)	Require or result in the construction of new storm water drainage facilities or expansion of existing				

	significant environmental effects?		\boxtimes	
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			\boxtimes
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			\boxtimes
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			\boxtimes
g)	Comply with federal, state, and local statutes and regulations related to solid waste?			\boxtimes

Discussion:

- a) The project would be in compliance with RWQCB MWRR Order No. 98-052. No impact would be anticipated.
- b) Although SCRWA may decide to increase tertiary capacity in the future if the demand for more recycled water exists, the potential expansion is not within the scope of this Initial Study. Nonetheless, upgrading the distribution system and installing a 1.1 million gallon tank is one element of a system-wide expansion. The Water Reclamation Planning Study prepared by SCRWA in 1995 identified several projects which could be implemented in the future to maximize recycled water to up to 15 mgd. Other than the proposed project described in this Initial Study, SCRWA has not committed to these projects at this time. The proposed project would not result in the need for additional wastewater treatment facilities, but rather would accommodate the existing capacity of 3 mgd tertiary treated effluent.
- c) The project would include providing adequate storm water drainage at both the pump station and storage tank locations. The project would create a total of approximately 5,000 square feet of additional impervious surface requiring drainage plans. The Christmas Hill Park was recently equipped with a storm drainage system into which the new pump station area would drain without consequence. Similarly, the proposed tank site is within a newly designed residential development equipped with newly installed storm drains. The installation of the two facilities would have less-than-significant impact on storm drainage systems.
- d, e) The project is designed to accommodate existing effluent capacity and would not increase water demand or wastewater flow. No impacts are anticipated.
- f, g) The project would not require solid waste disposal services. No impacts are anticipated.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				\boxtimes
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulative considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				\boxtimes
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	П	П	×	П

Less Than

SECTION 3

SUMMARY OF MITIGATION MEASURES

This section provides a summary of mitigation measures identified in the Initial Study.

AESTHETICS

Mitigation Measures

- I.1) SCRWA should contact the Eagle Ridge developer and coordinate a strategy to provide landscaping which obscures the view of the tank within the neighborhood. This could include providing trees on adjacent residential lots between facing windows and the proposed tank.
- **I.2)** SCRWA should alert prospective buyers in the area of the plans to install the tank. This could be accomplished by placing signs on the property and by communicating with the developer or real estate company. If the properties are already sold, the owners should be informed of the project.
- **I.3)** Trees and native shrubbery species could be established on the tank site to obscure the view.
- **I.4)** Earth berms could be used to obscure the view of the tank from the new homes planned to the southeast.
- **I.5)** Fences or gates should be installed to limit access and obscure the view of the tank.
- **I.6)** The tank should be painted an appropriate color to reduce its obtrusiveness: either evergreen to match the oak trees or tan to match the summer hillside grasses.
- **I.7)** The storage tank would be constructed of materials that would not produce glare. The tank should be painted with non-glare paint to blend in to the surrounding hillside.
- **1.8)** The design of the pump station to be installed in Christmas Hill Park should be approved by the City of Gilroy Department of Community Services.

AIR QUALITY

Mitigation Measures

Measures derived from the City of Gilroy General Plan EIR:

- III.1) SCRWA will implement dust reduction measures during construction including the following basic control measures:
 - Cover stockpiled soils overnight and weekends
 - Water all active construction areas at least twice daily
 - Utilize wet methods during storage tank location excavation including consistent watering or misting to minimize exposure to serpentine material
 - Cover all trucks hauling soil, sand, and other loose materials
 - Sweep all paved access roads daily if visible soil material is carried onto adjacent public streets
 - Replant vegetation in disturbed areas as quickly as possible
- III.2) SCRWA will implement the following measures during construction activities to reduce emissions from construction equipment
 - Idling time for all construction equipment will not exceed five minutes
 - All equipment will be adequately tuned and maintained in accordance with the manufacturer's specifications
 - When feasible, alternative fueled or electric vehicles shall be used
 - The minimum practical engine size will be used
 - Gasoline-powered equipment shall be equipped with catalytic converters where feasible

Measures derived from the O'Connell Ranch EIR:

III.3) Earthmoving activities will be suspended during periods of high wind

Measures developed for this analysis:

- III.4) If geotechnical reports indicate that excavation at the storage tank location would involve breaking into serpentine base rock or performing rock crushing operations, measures will be implemented to avoid dust emissions and ensure worker safety including the following:
 - To mitigate any potential health risks related to asbestos exposure, SCRWA will ensure that the contractor water the site during excavation at least twice a day or more frequently as necessary to eliminate visible dust emissions.
 - SCRWA will ensure that the contractor prepares and implements a Health and Safety Plan to meet applicable federal, state, and local environmental and worker-safety regulations including BAAQMD regulations regarding excavations in serpentine rock and the Occupational Safety and Health Administration (OSHA) regulations promulgated in the Code of Federal Regulations (CFR) 29, Section 1910.1001.

BIOLOGICAL RESOURCES

Mitigation Measures

- **IV.1)** Pipeline excavations within the riparian habitat along Uvas Creek should be avoided if possible. If excavations within the Uvas Creek flood zone and riparian area are essential, impacted habitat should be replaced upon completion of the project to match the pre-construction conditions.
- **IV.2)** Prior to excavating within the riparian corridor of Uvas Creek, SCRWA will ascertain whether the specific excavation activities would involve placing fill material within the streambed, prompting the need to obtain the following permits:
 - Section 404 of the Clean Water Act permit issued by the Army Corps of Engineers
 - Section 401 of the Clean Water Act certification issued by the RWQCB
 - Streambed Alteration Agreement form the CDFG pursuant to Section 1601 and 1603 of the California Fish and Game Code

If these permits are not required, SCRWA will obtain written acknowledgement from the CDFG, confirming that excavation activities within the riparian corridor would not require permitting.

CULTURAL RESOURCES

Mitigation Measure

V.1) If cultural resources are encountered during construction of the project, the contractor will avoid altering the materials and their context until a qualified archaeologist has evaluated the situation. Project personnel will not collect cultural resources. Procedures for stopping construction in the event that cultural resources are exposed will be part of the project plans and specifications. The qualified archaeologist will determine the best course of action.

GEOLOGY

Mitigation Measures

- VI.1) Prior to installing the storage tank, a geotechnical survey will be conducted to determine appropriate design and construction methods on the hillside. The tank design will comply with the Uniform Building Code for hillside construction in a seismically active area.
- VI.2) The pipeline will be equipped with emergency shut-off valves.
- VI.3) Proposed facilities will be incorporated into SCRWA's operations and maintenance program which includes contingencies for catastrophic failures.

VI.4) Design of the storage tank location will include a drainage plan to minimize erosion potential on the steep hillside for the life of the project. The design will be submitted to the City of Gilroy Department of Building and Safety for approval prior to installation.

From City of Gilroy General Plan EIR:

VI.5) The project grading plan shall include an improved drainage and erosion control plan to minimize impacts from erosion and siltation during grading. This plan should conform to all standards adopted by the City of Gilroy. This plan should include measures such as restricting grading to the dry season when possible, protecting all finished graded slopes from erosion, protecting downstream storm drainage inlets from sedimentation, and use of silt fencing to retain sediment in the project site.

After construction is completed all exposed soils shall be seeded or vegetated with City approved seed mix and native vegetation to ensure that soils are stabilized.

HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measures

VII.1) Contractor specifications shall include measures requiring the preparation of project-specific Health and Safety Plans for each component of the project which would include contingencies for the use of hazardous materials including the potential of encountering asbestos-containing rock.

HYDROLOGY

Mitigation Measures

Measure derived from the Water Reclamation Planning Study

- VIII.1) If the recycled water exhibits elevated sodium concentrations, SCRWA should promote the following management techniques among users as necessary to reduce salt build-up in surface soils:
 - Planting salt-tolerant plants,
 - Applying extra water to leach excess salt,
 - Irrigating more frequently to maintain a higher soil moisture content.
 - Modifying soil to improve water percolation, or
 - Installing artificial drainage to improve leaching

Measures derived from this analysis

VIII.2) For each portion of the project, SCRWA will ensure that the construction contractor implements appropriate erosion control measures which could include scheduling to avoid the rainy season, collecting dust-control water runoff, providing storm drain outlet protection using straw bales, maintaining slope stabilization, and preserving existing vegetation as described in the California Storm Water Best

- Management Practices Handbook. These measures would be incorporated in the grading plan described in Mitigation Measure VI.5.
- VIII.3) If excavations are necessary to access the pipeline within the Uvas Creek flood zone, construction activities will be performed within the summer months.
- VIII.4) SCRWA will ensure that the placement, contents, and volume of the proposed storage tank is disclosed to the current or prospective homeowners adjacent to and down-gradient from the proposed tank location.

NOISE

Mitigation Measure

Measure derived from the City of Gilroy General Plan EIR

- XI.1 As part of normal City review and approval procedures for future projects the following measures should be incorporated to mitigate construction noise:
 - a) Limit construction activity to weekdays between 7:00 AM and 7:00 PM and Saturdays and holidays between 9:00 AM and 7:00 AM, with no construction on Sundays
 - b) Require that all internal combustion engine-driven equipment are equipped with mufflers which are in good condition and appropriate for the equipment
 - c) Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area

Measure derived from this analysis

XI.2 The pump station would be sound-insulated, designed to prevent appreciable increase to night-time ambient noise levels at a distance of 50 feet.

SECTION 4

REFERENCES

- California Regional Water Control Board, Central Coast Region, Water Quality Control Plan, 1994
- California Regional Water Control Board, Central Coast Region, Master Water Reclamation Requirements Order No. 98-052 For South County Regional Wastewater Authority and Indirect Users, Santa Clara County, 1998
- California State Water Resources Control Board, California Storm Water Best Management Practices Handbook for Construction Activity, 1993
- Santa Clara Valley Water District, Integrated Water Resources Plan, Final Report, 1997
- Cities of Gilroy and Morgan Hill, Draft Environmental Impact Report for the Long Term Wastewater Management Plan, 1990
- City of Gilroy, 1999 2000 Draft General Plan, 1999
- City of Gilroy, Draft Environmental Impact Report for the 1999-2000 General Plan
- City of Gilroy, Uvas Creek Park Preserve Master Plan Initial Study, 1993
- South County Regional Wastewater Authority, Water Reclamation Planning Study, 1995
- City of Gilroy, Planning Department, Revised Draft, Subsequent Environmental Impact Report for O'Connell Ranch, 1992
- Division of Mines and Geology Special Publication 42, Fault-Rupture Hazard Zones in California, 1997
- Division of Mines and Geology, Alquist-Priolo Earthquake Fault Zone Maps: Gilroy R82 and Chittenden R82

References Continued

FEMA Flood Insurance Rate Map # 0603400003D

Durkin, Melissa; City of Gilroy Planning Department, personal communication, January 25, 2000

Gasser, Jim; SCRWA, personal communication, January 25, 2000

Nguyen, Jacob; Montgomery Watson, personal communication, January 18, 2000

APPENDIX A

MASTER WATER RECLAMATION REQUIREMENTS ORDER NO. 98-052

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION 81 Higuera Street, Suite 200 San Luis Obispo, California 93401-5427

MASTER WATER RECLAMATION REQUIREMENTS ORDER NO. 98-052 Waste Discharger Identification No. 3 430100003

FOR

SOUTH COUNTY REGIONAL WASTEWATER AUTHORITY AND INDIRECT USERS SANTA CLARA COUNTY

The California Regional Water Quality Control Board, Central Coast Region (hereafter Board), finds that:

- The South County Regional Wastewater Authority (hereafter referred to as the "SCRWA") owns and operates a wastewater collection, treatment, disposal, and water recycling facility (hereafter referred to as the "Facility").
- The Facility is located in South Santa Clara County along Southside Drive, approximately two miles southeast of the City of Gilroy (Sections 9, 15, 16 & 17, T115, R4E, MD B&M) as shown on Attachment "A" of this Order.
- 3. The Facility serves the domestic sanitary wastewater pretreatment, collection, treatment and disposal needs of the Cities of Gilroy and Morgan Hill (hereafter referred to as the "Cities"). That aspect of the Facility is regulated under a separate Order issued by the Regional Board and is not the subject of this Order.
- 4. The Facility discharges stomwater flows directly to surface waters and has applied for a separate stormwater discharge permit under the State Water Resources Control Board's Water Quality Order No. 97-03-DWQ National Pollutant Discharge Elimination System General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.
- SCRWA treats an average dry weather flow (ADWF) of 7.5 million gallons per day (MGD) using an advanced secondary treatment process.

- The treatment consists of influent screening, aerated grit removal, nitrification, denitrification, oxidation using an oxidation ditch, and secondary clarification. Plant effluent can be discharged to 370 acres of percolation/evaporation ponds,
- 6. SCRWA can divert up to three MGD of the secondary effluent to a tertiary treatment process which meets the water reclamation criteria of the State Department of Health Services (Title 22, Division 4, Chapter 3. Sections 60301-60355 of the California Code of Regulations). The tertiary treatment process consists of coagulation, filtration, chlorination, then dechlorination. A portion of the tertiary treated wastewater is used onsite for landscape irrigation in-plant process water, and to supply the fire protection system.
- SCRWA has plans to increase tertiary treatment capacity to 15 MGD.
- 8. The Facility augments the water resources needs of the Cities and the Santa Clara Valley Water District (hereafter referred to as the "SCVWD") by supplying recycled water to those entities. For purposes of this Order, the SCRWA is hereafter referred to as the "Producer" of recycled water. Historic water recycling has been regulated by Waste Discharge Requirements Order No. 85-82, adopted by the Regional Water Quality Control Board on May 10, 1985.

- Agents for SCRWA filed a Report of Waste Discharge on April 4, 1997, for authorization to use up to 15 MGD of disinfected tertiary recycled water in conformance with water reclamation criteria contained in California Code of Regulations, Title 22.
- 10. The Producer will authorize specific reuse projects on a case-by-case basis in accordance with an approved permit-based program of rules and regulations for recycled water users. The Producer will use existing recycled water transmission facilities as shown in Attachment B to transport recycled water to Users. The Producer will also design and incrementally install recycled water transmission facilities to serve other, future projects.
- 11. Users will document compliance with all conditions of the Order and of Title 17 and Title 22 of the California Code of Regulations (CCR). Each User will demonstrate to the Producer the absence of cross-connections before being issued a permit. The Producer will maintain this information at its facility.
- 12. The Producer will continue to investigate other potential reuse strategies such as groundwater recharge, surface water augmentation, and dual water supply for new construction. This will enable the Producer to move towards achieving a goal of reusing the maximum possible amount of recycled water.
- 13. On July 14, 1992, the Governor approved Assembly Bill No. 3012 (AB 3012), which added Section 13523.1 to the California Water Code, and authorizes regional boards to issue master reclamation permits to a supplier and/or distributor of recycled water in lieu of prescribing water reclamation requirements for a user of recycled water. AB 3012 also removes the requirement, except upon written request of a regional board, that the Users file a report with a regional board to use Recycled water from a supplier/distributor for whom a master reclamation permit has been issued. Similarly, AB 3012 exempts any such user of recycled water from the requirement to file a report with a regional board related to any

- material change in the character of the recycled water or its use. This Order is intended to be a master reclamation permit that is consistent with Section 13523.1.
- 14. California Water Code Section 13512 states that it is the intention of the legislature that the State undertake all possible steps to encourage development of water reclamation facilities so that recycled water may be made available to help meet the growing water demands of the State.
- 15. California Water Code Section 13523 provides that a regional board, after consulting with and receiving the recommendations of the State Department of Health Services, and if it determines such action to be necessary to protect the public health, safety, or welfare, shall prescribe water reclamation requirements for water which is used or proposed to be used as recycled water. The use of recycled water could affect the public health, safety, or welfare, and requirements for those uses are, therefore, necessary in accordance with the California Water Code.
- 16. In California Water Code Section 13550, the Legislature defines the use of potable domestic water for non-potable uses, including but not limited to cemeteries, golf courses, parks, highway landscaped areas, irrigation, and industrial uses as a waste or an unreasonable use of such water within the meaning of Section 2 of Article X of the California Constitution when suitable Recycled water is available.
- 17. California Water Code Section 13576(e) states that the use of recycled water has proven to be safe from a public health standpoint and that the State Department of Health Services is updating regulations for the use of recycled water.
- 18. This Order's requirements conform with and implement the water reclamation criteria of the State Department of Health Services (Title 22, Division 4, Chapter 3, Sections 60301-60355 of the California Code of Regulations [CCR]) to protect the public health, safety, and welfare.

- 19. State Department of Health Services' criteria for use of recycled water is in Title 22, Chapter 3, of the California Code of Regulations. The Board has consulted with the Department of Health Services regarding the regulation of this discharge.
- 20. The Water Quality Control Plan, Central Coastal Basin (Basin Plan) was adopted by the Board on September 8, 1994. The Basin Plan incorporates State Board plans and policies by reference and contains a strategy for protecting beneficial uses of State waters.
- 21. Federal regulations require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have reasonable potential to cause, or contribute to in-stream excursions above narrative or numerical water quality standards. Based on information submitted as part of the application, in studies, and as directed by monitoring and reporting programs, the Board finds that the discharge does not have a reasonable potential to cause or contribute to an in-stream excursion above a water quality objective.
- 22. Existing and anticipated beneficial uses of ground water in the vicinity of the discharge include:
 - a. Domestic water supply:
 - b. Agricultural water supply
 - c. Industrial process supply; and,
 - d. Industrial service supply.
- 23. Present and anticipated beneficial that could be affected by the discharge include:
 - a. Municipal and Domestic Supply;
 - b. Agricultural Water Supply;
 - c. Industrial Service Supply;
 - d. Groundwater Recharge:
 - e. Water Contact Recreation;
 - f. Non-Contact Water Recreation;
 - g. Wildlife Habitat;
 - h. Cold Freshwater Habitat:
 - i. Warm Freshwater Habitat;
 - i. Migration of Aquatic Organisms;

- k. Spawning, Reproduction, and/or Early Development;
- Preservation of Habitats of Special Significance;
- m. Rare, Threatened, or Endangered Species;
- n. Estuarine Habitat;
- o. Freshwater Replenishment;
- p. Navigation;
- q. Commercial and Sport Fishing; and
- r. Shellfish Harvesting,
- 24. These waste discharge requirements are for an existing facility and are exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Section 15301, Chapter 3, Title 14, of the California Code of Regulations.
- 25. A permit and the privilege to discharge waste into waters of the State is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and of the Clean Water Act (as amended or as supplemented by implementing guidelines and regulations) and with any more stringent effluent limitations necessary to implement water quality control plans, protect beneficial uses, and prevent nuisance. Compliance with this Order should assure conditions are met and mitigate any potential changes in water quality due to the project.
- 26. The Board has notified the Producer and interested persons of its intent to prescribe waste discharge requirements and water reclamation requirements for the proposed discharges, and provided them with an opportunity for a public hearing and to submit their written views and recommendations.
- 27. The Board, at a public meeting held May 29, 1998, heard and considered all comments pertaining to the discharge and found this Order consistent with the above findings.
- IT IS HEREBY ORDERED, pursuant to authority in Section 13377 of the California Water Code, that South County Regional Wastewater Authority, its agents, successors, and assigns, may discharge waste

May 29, 1998

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WDR Order No. 98-052

from its wastewater treatment plant providing it complies with the following:

A. PROHIBITIONS

- 1. The treatment, storage, distribution, or reuse of recycled water shall not create a nuisance as defined in section 13050(m) of the California Water Code. CIMC
- No recycled water used for irrigation shall be applied during periods of rainfall or when soils are saturated such that runoff occurs. http://dx.
- No recycled water used for irrigation shall be allowed to escape to areas outside the designated use areas by surface flow or by airborne spray. DIS
- Recycled water shall be confined to areas of authorized use without discharge to surface waters or drainageways.
- Spray, mist, or runoff shall not enter a dwelling or food handling facility, and shall not contact any drinking fountain, or designated outdoor eating areas. IMS
- 6. No recycled water shall be discharged from the treatment facilities, irrigation holding tanks, storage ponds, or other containment, other than for irrigation or industrial reuse in accordance with this Order, Waste Discharge Requirements for the Producer, or for discharge to a municipal sewage collection system.
- 7. There shall be no cross-connections between the potable water supply and pipes containing recycled water. Supplementing recycled water with water used for domestic supply shall not be allowed except through an air-gap separation. In accordance with CCR Title 17, Section 7604, a reduced pressure principle backflow device shall be provided at premises

where recycled water is used and there is no interconnection with the potable water system. This requirement does not apply to individual residences using recycled water for landscape irrigation as part of an approved dual plumbed use area as defined in CCR Title 22. Section 60312. DHS

- Personnel involved in producing, transporting, or using recycled water shall be informed of possible health hazards that may result from contact and use of recycled water. DHN
- Delivery of recycled water shall cease during any period these Reclamation Specifications cannot be met. IPJ
- Spray irrigation of recycled water shall be accomplished at a time and in a manner to minimize ponding and the possibility of public contact with sprayed materials. DHS
- 11. All reclamation reservoirs and other areas with public access shall be posted (in English and Spanish) to warn the public recycled wastewater is being stored or used.
- Recycled water systems shall be properly labeled and regularly inspected to assure proper operation, absence of leaks, and absence of illegal connections. THIS
- A minimum freeboard of two feet shall be maintained in the reclamation storage ponds. ^{BPJ}
- Recycled water shall not be stored or applied to any areas located within 100 feet of any well used for domestic purposes.
- For golf course use, the score cards must clearly state that reclaimed water is used for irrigation. DIGS
- 16. Hydraulic and constituent (Nitrogen, etc.) loading rates for reclamation uses shall be based on crop consumption and tolerance and shall not exceed what is reasonable for production of the crop.

[&]quot;General permit conditions, definitions and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits." dated January 1985, included as part of this Order.

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408 232 0842

B. RECYCLED WATER LIMITATIONS

- 1. The Producer shall assure that treated effluent put to use for disinfected tertiary recycled water shall be an adequately oxidized, filtered, and disinfected water, as defined in CCR Title 22. Division 4, Chapter 3, Sections 60301-60335, or alternatively defined and approved by State Department of Health Services (DHS).
- 2. The Producer shall discontinue delivery of recycled water to Users during any period which it has reason to believe that the limits established in Section B of this Order are not being met. The delivery of recycled water shall not be resumed until all conditions which caused the limits to be violated have been corrected. APJ
- 3. The State Department of Health Services is currently revising the Title 22 regulations for water reuse. When revised regulations are finalized, the Executive Officer may authorize changes to the restricted and unrestricted recycled water uses consistent with those regulations. OHS
- 4. Monthly average flow volumes shall not exceed 15.0 MGD or the total monthly demand of the primary users. MINN
- 5. Tertiary treated recycled water shall not exceed the limits^A of Table 4 - Disinfected Tertiary Recycled Water Limits

Table 4- Disinfected Tertiary Recycled Water Limits (mg/l)

Sitting (ing. i)						
Parameter Daily 30-Day 7-Day Max Mean Mean						
BOD,	20	10				
Total Suspended Solids	20	10	90 W-			
Nitrate as N	10	5	••			

- 6. Recycled Water shall not have turbidity which exceeds the following limits: "His
 - a. Daily average turbidity must be less than or equal to 2 NTU.
 - b. turbidity shall not exceed 10 NTU at any time, and

- c. turbidity must not exceed 5 NTU for more than five percent of the time.
- 7. Recycled water shall not contain total coliform concentrations exceeding the following limits:DHS
 - a. the seven-day median concentration must not exceed an MPN of 2.2/100 ml.
 - b. concentrations must not exceed 23/100 ml in more than one sample taken over a 30day range.
 - c. concentrations must be less than 240/100 ml at all times.
- 8. Recycled Water shall have a CT value (chlorine concentration times modal contact time) of not less than 450 mg-min/l at all times with a modal contact time of at least 90 minutes based on 9.0 MGD. Aux
- 9. Recycled water shall not exceed the limits of Table 5 - Maximum Contaminant Levels (see below).

C. PROVISIONS

- 1. This Order supersedes Order No. 85-82 for all uses specified by that Order. Order No. 85-82 is hereby rescinded.
- 2. The Producer has established rules and regulations for reclaimed water Users governing the design and construction of reclaimed water use facilities and the use of reclaimed water, in accordance with the uniform statewide reclamation criteria established pursuant to California Water Code Section 13521, and subject to the Department of Health Services and Executive Officer review and approval. The Producer has also developed and submitted administrative procedures specifying how the reclaimed water rules and regulations and permit-based system for regulating users will be implemented.

Table 5- Maximum Contaminant Levels (mg\l, unless indicated otherwise)

Table 5- Maximum Contaminant Levels (mg/l, unless indicated otherwise) Considered Primary MGL MGL				
			Miles	
	ORC	AM/GS	Name of the part of the last	
Alachior (Alanex)	0.003	Heptachlor	1000001	
Atrazine (Aatrex)	0.003	Heptachlor epoxide	1000001	
Bentazon (Basagran)	0.018	Hexachlorobenzene	10001	
Benzene	0.001	Hexachlorocyclopentadiene	0.05	
Велго(в)ругене	0.0002	Lindane (gamma-BHC)	0.0002	
Carbofuran (Furnden)	0.018	Methoxychior	0.04	
Carbon tetrachloride	0.0003	Molinate (Ordam)	0 02	
Chlordane	0.0001	Munochlorobenzene (Chlorobenzene)	0.07	
2,4-D	0.07	Oxamyi	03	
Dalapon	0.2	Pentachlorophenol	0 001	
1,2-Dibromo-)-chloropropane (DBCP)	0.0002	Picloram	03	
1,2-Dichlorobenzene (o-Dichlorobenzene)	0.6	Polychlorinated biphenyls (PCBs)	0 0005	
1,4-Dichlorobenzene (p-OCB)	0.005	Simazine (Princep)	0 004	
1.1-Dichloroethane (1,1-DCA)	0.005	Styrene (Vinylbenzene)	01	
,2-Dichloroethane (1,2-DCA)	0.0005	2,4,5-TP (Silvex)	0 03	
,1-Dichloroethylene (1,1-DCE)	0.006	2,3,7,8-TCDD (Dioxin)	0 0000000	
sis-1,2-Dichloroeths lene	0.006	1,1,2,2-Tetrachloroethane	0 001	
rans-1.2-Dichloroethylene	0.01	Tetrachioroethylene (PCE)	0.005	
Dichloromethane (Methylene chloride)	0.005	Thiobencarb (Bolero)	0.003	
1,2-Diehloropropane (Propylene dichloride)	0.005	Toluene (Methylbenzene)	0.15	
Di(2-ethylhexyl)adipate	0.4	Toxaphene	0.003	
1,3-Dichloropropene	0.0005	12.4-Trichlorobenzene (Unsym-Trichlorobenzene)		
Di(2-ethylhexylphthalate (DEHP)	0.0003	1.1.1-Trichloroethane (1.1.1-TCA)	0.07	
Dinoseb	0.007	1.1.2-Trichloroethane (1.1.2-TCA)	0.200	
	0.02	Trichloroethylene (TCE)	0.005	
Diquet Endrin		Trichlorofluoromethane (Freon 11)	0 003	
	0.002		0.15	
Endothal	0.1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freen 113)	1.2	
Ethylbenzene (Phenylethane)	0.7	Sum of bromodichloromethane.	01	
		dibromochloromethane, promoform, and	1	
C.L. 1	2.222	chloroform	-	
Ethylene dibromide (EDB)	0:00005	Vinyl chloride	0.0005	
Glyphosaie	0.7	Xylenes (single isomer or sum of isomers)	1 750	
		ANCS	an party special section of the con-	
Aluminum	1	Fluoride		
Antimony	0.006	Annual ave. of max. daily air temperature		
V senic	0.05	<53.7 degrees Fahrenheit (°F')	2.4	
Special	7 MFL	53.8 to 58.3 °F	2.2	
Barium	I	58.4 to 63.8 °F	2.0	
Beryllium	0.004	63.9 to 70.6 °F	1.8	
Cadmium	0.005	70.7 to 79.2 °F	1.6	
Chromium	0.05	79.3 to 90.5 °F	1.4	
Cyanide	0.2			
Mercury	0.002			
Vickel	0.1			
Nitrate (as NO3)	45		I	
Nitrate + Nitrite (sum as nitrogen)	10		Ţ	
Vitrite (as nitrogen)	ī		7	
Selenium	0.05			
Thallium	0.002			
		CONTROL CONTRO		
Gross alpha particle activity	IS pCI/LE	Strontium-90	8 pCI/L	
Dross beta particle activity	30 pCi/L	Tritium	20,000	
			pCi/L	
	5 pCi/L		20 pCi/L.	

Also listed W/Secondary MCL of 0.001 mg/L.

MFL - million fibers per liter, MCL is for fibers exceeding 10 microns in length

 $^{^{\}circ}$ including radium-226 but excluding radon and uranium.

e pCi/L = picocuries per liter

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May 29, 1998

- 3. Reclaimed Water Use permits, issued by the Producer in accordance with approved rules and regulations, form the basis of permitted reclaimed water use by specific Users. Reclaimed Water Use permits shall specify self-monitoring requirements for each User. If someone other than the User is responsible for applying the reclaimed water (Distributor), e.g., a truck hauler, then the User shall inform them of these requirements in a written permit or other suitable manner. a Distributor shall fill out a Reclaimed Water Release Form when receiving reclaimed water from the Producer.
- 4. A copy of the Reclaimed Water Use permit and the Order must be provided to the Users by the Producer. The Users must have these available at all times for inspection by Regional Board staff, the Producer, or State/County Health Officers. The Distributors must carry the Reclaimed Water Release Form at all times.
- 5. The Producer shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer. The Producer is responsible for collecting reports from Users. Users are responsible for submitting on-site observation reports and use data to the Producer, who will compile and file self-monitoring reports with the Regional Board. The Producer, at its discretion, may assume the User's responsibility for on-site observation reports and use data.
- 6. The Producer will be responsible for ensuring that reclaimed water meets the quality standards of this Order and for operation and maintenance of major transport facilities and associated appurtenances. Users will be responsible for the application of reclaimed water on their respective use areas and associated operations and maintenance. The Producer will conduct periodic inspections of User facilities to monitor compliance with the conditions of the Producer's issued permit and this Order.
- 7 The Producer and Users shall maintain in good working order and operate as efficiently as possible any facility or control system installed

- by the Producer or Users to achieve compliance with the water reclamation requirements.
- 8. The Producer, Users, and distributors shall receive employee training to assure proper operation of reclamation facilities, worker protection, and compliance with this Order. In accordance with CCR Title 17, Section 7586, each User shall designate a Reclaimed Water Supervisor responsible for compliance with permit conditions.
- The Producer shall assure that the backflow preventers are in proper working order by testing initially and annually thereafter, in accordance with CCR Title 18, Section 7605.
 Reports of testing and maintenance shall be maintained by the Producer.
- 10. The Producer and Users shall assure that all above ground equipment, including pumps, piping, storage reservoir, and valves, etc. which may at any time contain reclaimed water shall be adequately and clearly identified with warning signs. The Producer and Users shall make all necessary provisions to inform the public that the liquid being distributed is reclaimed water and is unfit for human consumption.
- 11. Reclamation facilities shall be operated in conformance with the California Department of Health Services' "Guidelines for Use of Reclaimed Wastewater for Irrigation and Impoundment," "Guidelines for Worker Protection at Reclamation Use Areas," the American Water Works Association, California-Nevada Section's Guidelines for the Distribution of Non-potable Water, and the Producer's approved reclaimed water use rules and regulations (which may clarify and/or modify the above guidelines) and the appropriate local administrative procedures.
- The Producer and Users shall permit the Board or its authorized representative in accordance with California Water code section 13267(c):
 - Entry upon premises where a regulated facility or activity is located or conducted.

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or where records are kept under the conditions of the Order,

- Access to and copy of any records that must be kept under conditions of this Order,
- Inspection of any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order,
- To photograph, sample, and monitor for the purpose of assuring compliance with this Order.
- The Discharger shall comply with "Monitoring and Reporting Program No. 98-052," as specified by the Executive Officer.
- 14. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated January 1984.

- 15. The Board will revise this Order periodically and may revise these requirements when necessary.
- 16. Pursuant to Title 23, Division 3, Chapter 9, of the California Code of Regulations, the Discharger must submit a written report to the Executive Officer not later than December 5, 2012 addressing:
 - a. Whether there will be changes in the continuity, character, location, or volume of the discharge; and,
 - Whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision.

I, ROGER W. BRIGGS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on May 29, 1998.

> Executive Office

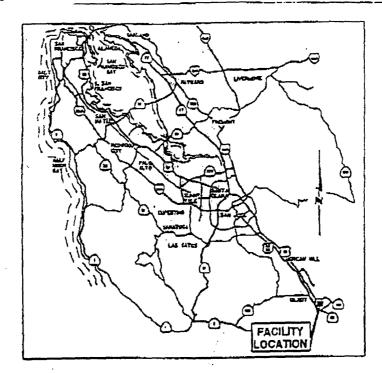
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California Water Code, Division 7

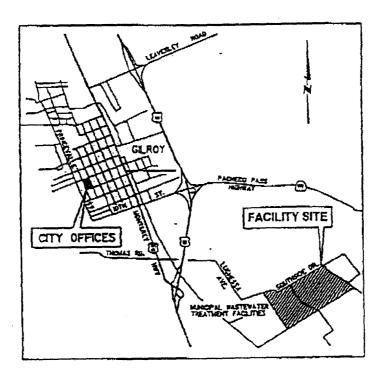
Regional Water Quality Control Board Staff's Best Professional Judgment

California Department of Health Services, Drinking Water Field Operations Branch under authority of Title 22, Division 4, Chapter 3 - Water Reclamation Criteria

The Discharger's Report of Waste Discharge



LOCATION MAP



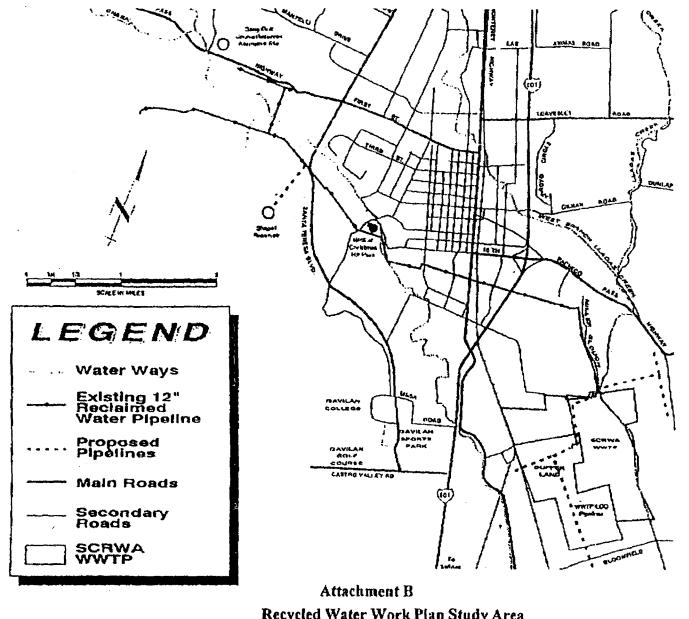
VICINITY MAP

NO SCALE

SOUTH COUNTY REGIONAL WASTEWATER AUTHORITY TREATMENT/RECYCLING FACILITY LOCATION

ATTACHMENT "A"





Recycled Water Work Plan Study Area

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

WATER RECLAMATION REQUIREMENTS MONITORING AND REPORTING PROGRAM NO. 98-052

Waste Discharger Identification No. 3 430100003

FOR SOUTH COUNTY REGIONAL WASTEWATER AUTHORITY AND INDIRECT USERS SANTA CLARA COUNTY

I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code. The principle purposes of a monitoring program by a Producer of recycled water, also referred to as self-monitoring program, are:

- To document compliance with water recycling requirements and prohibitions established by this Regional Board; and
- 2. To facilitate self-policing by the Producer in the prevention and abatement of pollution arising from water recycling.

II. RECYCLED WATER SAMPLING AND ANALYSIS

The Producer shall document tertiary effluent quality under their regular facility Waste Discharge Requirements self-monitoring program (Order No. 98-053). Table MRP-1 contains a schedule for monitoring. For any instance where Table MRP-1 does not coincide with the facility's regular monitoring requirements, the more frequent monitoring will prevail.

III. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Violation of Requirements

In the event the Producer is unable to comply with conditions of the water recycling requirements and prohibitions, the Producer shall immediately notify the Regional Board by telephone, then submit a written follow-up report within two weeks of the noncompliance. The written report shall include pertinent information explaining reasons for noncompliance and shall indicate what steps are being taken to prevent the problems from recurring.

2. Annual Self-Monitoring Report

An annual report for each calendar year shall be submitted to the Board by January 30 of the following year. The report shall include:

a. Letter of Transmittal: A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the

Producer has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory.

The transmittal letter shall contain a statement by the Producer, or the Producer's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate, and complete.

- b. Tabulations of the result from each required analysis by Producer specified in Table MRP-1 (Attachment A) by date, time, type of sample, and station.
- c. A list of existing and new authorized recycled water Users, including the name, location, and projected annual flow to be delivered.
- d. Tabulation of inspection and observations reuse sites, including User's standard observations and random inspections by the Producer.
- e. A summary of effluent violations related to water recycling, violations found during inspection of reuse sites, corrective actions taken, and any changes to or revoking of User authorizations.
- f. An update regarding development of the South County Regional Wastewater Authority Water Recycling Workplan, including planning, design, and construction of facilities, and preparation of required reports and technical documents.

IV. STANDARD OBSERVATIONS

- 1. Evidence of runoff of recycled water from the site (show affected area on a sketch, and estimate volume).
- 2. Odor of wastewater origin from irrigation site: If present, indicate apparent source, characterization, direction of travel, and any public use areas or offsite facilities affected by the odors.
- 3. Evidence of ponding of recycled water, and/or evidence of mosquitoes breeding within the irrigation area due to ponded water.
- 4. Warning signs properly posted to inform public that irrigation water is recycled water, which is not safe for drinking.
- 5. Evidence of leaks or breaks in the irrigation system pipelines or tubing,
- 6. Evidence of plugged, broken, or otherwise faulty drip irrigation system emitters or spray irrigation sprinklers.

V. DESCRIPTION OF SAMPLING AND OBSERVATION STATIONS

I. RECYCLED WATER

Station

Description

E-001

Location at South County Regional Wastewater Authority Treatment and Recycling Facility where a representative sample of treatment plant effluent being diverted for recycling can be obtained and total diverted flow can be measured.

MRP No. 98-052

-3-

May 29, 1998

2. LAND OBSERVATION STATIONS

Station

Description

L-I to L-n

Locations at a sufficient number of points at reuse areas in order to ensure

compliance with water recycled requirements.

3. <u>IMPOUNDMENT FACILITIES</u>

Station

Description

P-I to P-n

Locations at points along the periphery of each storage, ornamental, golf

course, or other pond or impoundment.

VI. SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS

- 1. The self-monitoring program is applicable during the periods when recycled water is in use. The Producer and Users are required to perform observations, sampling, measurements, and analyses according to the schedule given in Table 1 (Attachment A).
- 2. The Producer shall require the Users to conduct a complete inspection of all irrigation lines, sprinklers, and emitters at least once each year during the dormant season. A report of the findings of these inspections, including descriptions of any significant repairs or modifications made to the distribution systems, shall be submitted in the annual report (due January 30 of each year).

Ordered by:

Executive Officer

Date:

4-4-93

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MRP No. 98-052

May 29, 1998

408 232 0842

ATTACHMENT A

TABLE MRP-1 SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS South County Regional Wastewater Authority Water Recycling Program Water Recycling Requirements

SAMPLING STATIONS	E-1	AllL	AllP
Flow Rate (gallons/day)	Continuous	Q'	Q'
Total Coliform (MPN/100ml)	D'		
Turbidity (NTU)	Cont. 2		
Dissolved Oxygen (mg/l)	3/W ²		
Dissolved Sulfides (mg/l (if DO < 1 mg/l)	3/W ²		
pH (Units)	3/W ²		
Chlorine Residual (mg/I)		A COLUMN TO THE REAL PROPERTY OF THE PARTY O	
Applicable Standard Observations		A ³	A ³

- 1 Flow totals for each User will be compiled by the Froducer on a quarterly basis. Daily average flow will be calculated from these quarterly totals and reported for each User in the Producer's annual report.
- 2 When producing recycled water.
- 3 Observations that the Producer requires each User to complete when recycled water it being used. The Producer will establish User self-monitoring requirements that depend on the size and complexity of each site, as a condition of each User's permit.

LEGEND FOR TABLE 1

Type of Sample

Grab = Instantaneous grab sample

C-24 = 24-hour composite sample

Cont. = Continuous monitoring (recorder)

Obs. = Observation

Sampling Frequency

D = Daily

3/W = Three times per week

Q = QuarterlyA = Annual

W = Weekly

2/M = Twice per month

APPENDIX B

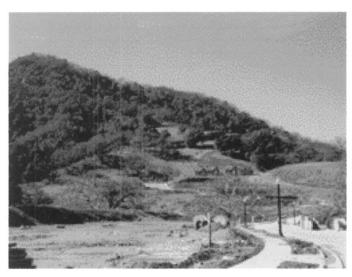
PHOTO-SIMULATIONS OF STORAGE TANK SITE



View 1 View of Tank Site in Close Proximity.

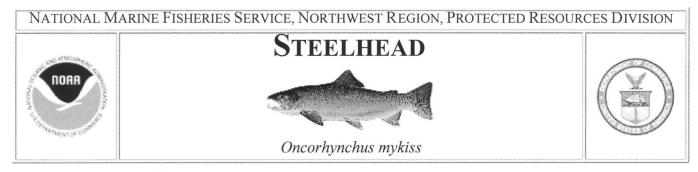


View 2 View of Tank SIte Looking West. from Neighboring Parcels.



View 3 View of Tank Site from Valley Floor.

Note: Photo-simulations do not include planned housing.



South-Central California Coast ESU*

Listed Threatened August 1997

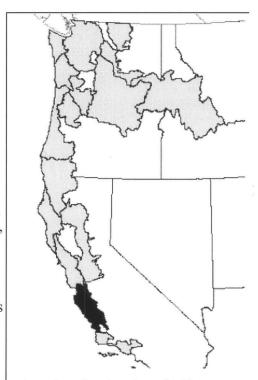
ESU* STATUS AND DESCRIPTION: Listed as a threatened species on August 18, 1997. The ESU includes all naturally spawned populations of steelhead (and their progeny) in streams from the Pajaro River (inclusive) to, but not including the Santa Maria River, California.

* An Evolutionarily Significant Unit or "ESU" is a distinctive group of Pacific salmon, steelhead, or sea-run cutthroat trout.

CRITICAL HABITAT:

Current Status - Designated on February 16, 2000.

Description - Critical habitat is designated to include all river reaches and estuarine areas accessible to listed steelhead in coastal river basins from the Pajaro River (inclusive) to, but not including, the Santa Maria River, California. Also included are adjacent riparian zones. Excluded are tribal lands and areas above specific dams or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years). Major river basins containing spawning and rearing habitat for this ESU comprise approximately 7,246 square miles in California. The following counties lie partially or wholly within these basins (or contain migration habitat for the species): Monterey, San Benito, San Luis Obispo, Santa Clara, and Santa Cruz.



More detailed critical habitat information (i.e., specific watersheds, migration barriers, habitat features, and special management considerations) for this ESU can be found in the <u>February 16, 2000</u> *Federal Register* notice.

PROTECTIVE REGULATIONS: Proposed on December 30, 1999.

ESU MAPS AND DATA:

- View Detailed South-Central California Coast Steelhead ESU Map (Adobe Acrobat PDF format)§
- View Range Map for all Steelhead ESUs
- Download steelhead ESU data in Arc/Info export and shape file format
- Download E-sized plot files of West Coast steeelhead listings in RTL file format for large format plotters

STATUS REVIEW:

NOAA Technical Memorandum NMFS-NWFSC-27, August 1996 Status Review of West Coast Steelhead from Washington, Oregon, and California



Status Review Update Memo (under construction)

FEDERAL REGISTER NOTICES:

View Federal Register Notices for Steelhead§

§You will need Adobe Acrobat Reader in order to view and print the detailed ESU map file and the Federal Register Notices. This program is available for free at the following link.

Home | Fact Sheets | Federal Register Notices | ESA Status Pages | Maps | Reports & Publications | Search | Contact Us | Updated March 31, 2000



Nitrate in Drinking Water Wells

Protecting Your Water Supply

What is Nitrate?

Nitrate is a naturally occurring compound that is formed in the soil when nitrogen and oxygen combine. Small amounts of nitrate are normal, but excess amounts can pollute supplies of groundwater.

Where Does Nitrate Come From?

Common sources of nitrogen in the soil are fertilizers, livestock waste, and septic systems. Excess nitrate in the soil is most often found in rural and agricultural areas. Some areas of the Llagas groundwater basin in southern Santa Clara County have higher than normal concentrations of nitrate.

How Does Nitrate Get Into My Well Water?

Nitrate travels easily through the soil, carried by rain or irrigation water into groundwater supplies. Wells that tap groundwater may be affected. Shallow wells, wells in sandy soil, or wells that are improperly constructed or maintained are more likely to have nitrate contamination.

What Are The Health Effects of Consuming Nitrate?

For most people, consuming small amounts of nitrate is not harmful. Nitrate can cause health problems for infants, especially those six months of age and younger. Nitrate interferes with their blood's ability to transport oxygen. This causes an oxygen deficiency, which results in a dangerous condition called methemoglobinemia, or "blue baby syndrome." The most common symptom of nitrate poisoning is bluish skin coloring, especially around the eyes and mouth. Infants six months of age and younger and pregnant and nursing women should avoid consumption of water high in nitrate.

The good news is that methemoglobinemia is easy for doctors to treat and babies can make a full recovery. Also, as babies grow, their bodies develop the ability to counteract the effects of excess nitrate. Thus, health risks are reduced for children older than six months of age and adults. For more information on the risks of nitrate consumption, consult your own doctor.

Cattle, horses, sheep, baby pigs, and baby chickens are also susceptible to nitrate poisoning. They too can fully recover if treated by a veterinarian in time.

How Do I Know if My Water is High in Nitrate?

Nitrate is colorless and odorless. The surest way to tell if you have nitrate in your water is to have it tested. If your water comes from a public water supply, such as a city supplier, it is tested regularly to ensure that it meets safe drinking water standards. If your water

comes from a private well, you are responsible for testing it and ensuring that it is safe to drink.

Where Can We Have Our Water Tested?

Residents of the Llagas Groundwater Basin area of southern Santa Clara County may be able to have their water tested for free by the Santa Clara Valley Water District. Call the Groundwater Protection Hotline listed below to receive information on the nitrate testing program. For a comprehensive analysis of your drinking water, contact the company that provides your water bill or consult a state certified laboratory. For a list of state certified laboratories in your area, contact the Public Information Office of the Santa Clara Valley Water District.

What Do The Results Of My Water Test Mean?

These guidelines will help you interpret the results of your water test. Be careful when interpreting different lab results. Nitrate can be measured as NO₃ or as NO₃-N, and the results mean very different things.

Measured as Level (mg/L)		Interpretation
	0 - 44	Below the drinking water standard. The nitrate level is safe for humans and livestock.
NO ₃	45-176	Higher than the drinking water standard. The water should not be consumed by infants six months of age or younger, or by pregnant or nursing women. It may be acceptable for adults and livestock though it is not recommended.
	176+	Significantly higher than the drinking water standard. The water should not be consumed. Install a water treatment system or use bottled water for drinking and cooking.
	0-9	Below the drinking water standard. The nitrate level is safe for humans and livestock.
NO ₃ -N	10-39	Higher than the drinking water standard. The water should not be consumed by infants six months of age or younger, or by pregnant or nursing women. It may be acceptable for adults and livestock though it is not recommended.
	40+	Significantly higher than the drinking water standard. The water should not be consumed. Install a water treatment system or use bottled water for drinking and cooking.

What Can I Do if My Water is High in Nitrate?

If the level of nitrate in your water is high, the most important thing to do is to make sure that your family uses an alternative source of water for drinking, cooking and mixing baby formula.

Don't boil the water. Boiling water before drinking it DOES NOT remove nitrate. In fact, it causes some of the water to evaporate, which increases the nitrate concentration.

For a long-term solution, you can treat the water to remove the nitrate. Treatment technologies that remove nitrate include reverse osmosis, anion-exchange, and distillation. Each type of system has advantages and disadvantages, and no single system will correct all water quality problems. Water treatment system vendors are listed in the yellow pages under "Water Filtration & Purification Equipment." Treatment systems are also available at some Department Stores for the do-it-yourself installers. When you purchase a system, be clear about the type of system that you need, and ask for a guarantee that the system will remove nitrate contamination.

How Often Should I Test My Water?

Unfortunately, nitrate is only one of several possible contaminants in well water. This is why the Water District recommends that well users conduct a comprehensive test of their water supply every one to three years, or more frequently if the taste, odor, or appearance of the water changes, or if you have specific health concerns.

How Can I Guard Against Nitrate in My Water?

Septic systems, animal waste and fertilizer are all potential sources of nitrate contamination. Water that comes into contact with a source of nitrate can carry that contamination through the soil and into the groundwater supply. Follow these guidelines to reduce the risk of nitrate contamination:

- 1. Proper well location: Wells should be located uphill (up gradient) and at least 100 feet away from septic tanks, leachfields, animal confinement areas and fertilized areas.
- 2. Proper well construction: Make sure your well casing extends above the ground, and construct an earth berm around the well to divert surface runoff away from the wellhead. Also, make sure your well has at least a 50 foot deep annular seal (grouting around the outside of the well casing) and an intact concrete slab on the wellhead.
- 3. Operate your septic system correctly: Maintaining your septic system regularly will help avoid system failure, which can lead to water contamination, the spread of disease, and the need for costly repairs. Follow these guidelines:
 - Don't run heavy vehicles over the area above your septic tank, drain pipes or leachfield.
 - Avoid planting trees or shrubs near drain pipes or the leachfield. Roots can clog the lines.
 - Don't dispose of chemicals or non-biodegradable materials in your toilet or drain.
 - Conserve water.
 - Install a lint trap on your washing machine.
 - Hire a reputable contractor to pump out your septic tank every two to three years.
 - If you have two leachfields, switch them every year.
- 4. Reduce your use of fertilizer: Use lawn and garden fertilizers only when necessary, and always according to the manufacturer's instructions. Farmers can use management practices that are both environmentally and economically sound. The Santa Clara Valley Water District will send a free copy of the book "50 Ways Farmers Can Protect Their Groundwater" upon request.

General information on nitrate and the free well water nitrate testing program:

Groundwater Protection Hotline Santa Clara Valley Water District

(408) 265-2607, ext. 2763

Information about well construction, well location, and chemigation:

Wells Services

Santa Clara Valley Water District

(408) 265-2600, ext. 2660

Information about health concerns relating to nitrate, well treatment, and septic system operation:

Santa Clara County Dept. of Environmental Health

(408) 299-6060

Water Quality Information Contact:

Frances Brewster Water Quality Specialist (408) 265-2607 ext. 2723 franbrew@scvwd.dst.ca.us Jim Scott Laboratory Supervisor (408) 265-2607 ext. 2119 jimscott@scvwd.dst.ca.us SCVWD
Public Information
Office
(408) 265-2607 ext.
2255
pio@scvwd.dst.ca.us

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For questions regarding page content, contact <u>Kent Haake</u> For questions regarding web related issues, contact the Webmaster@scvwd.dst.ca.us

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